

Fig. 1

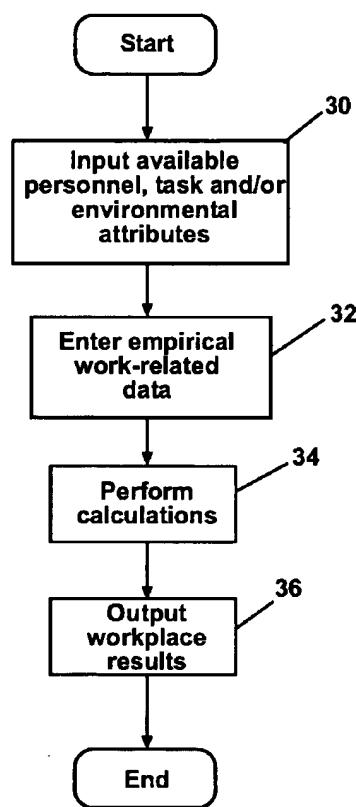


Fig. 1A

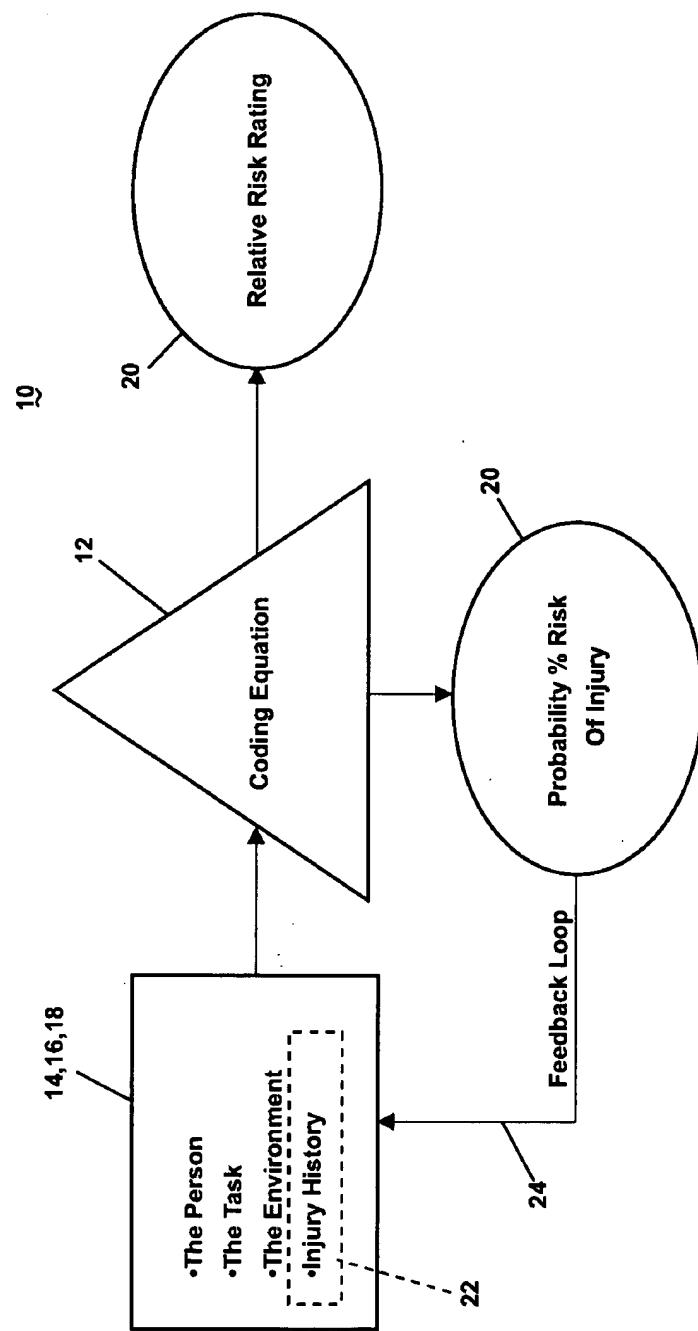


Fig. 1B

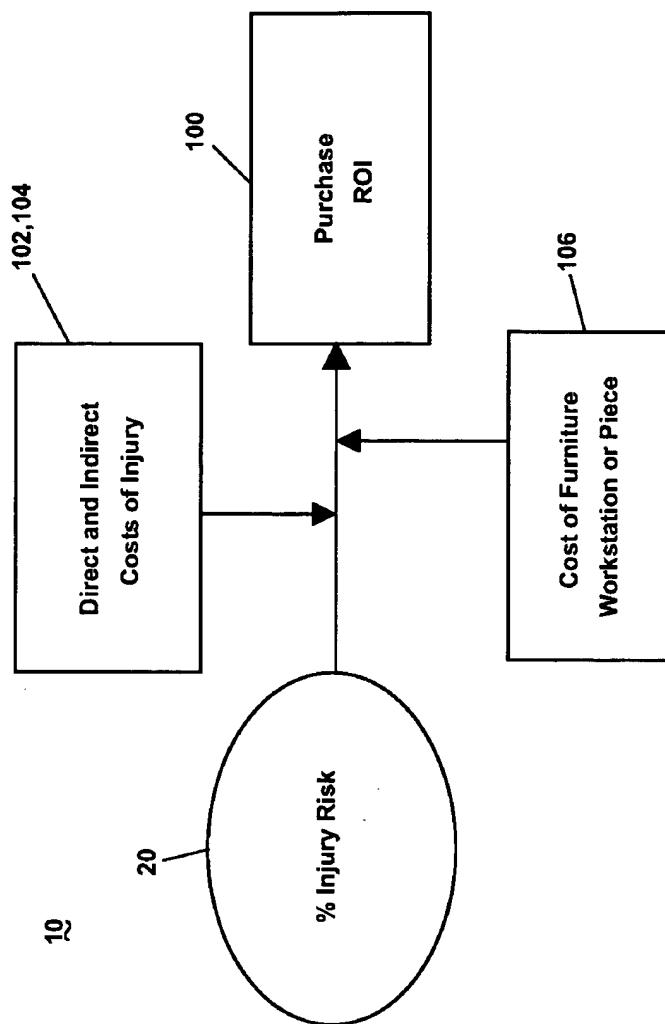


Fig. 1C

Product	Injury Risk	Indirect Cost	Direct Cost	Product Cost	ROI	Fatigue Factor	Productivity
Product or Wkstn A	0.50%	\$67,500	\$22,500	\$4,800	25.00%	0.975	102.50%
Product or Wkstn B	2.00%	\$67,500	\$22,500	\$3,800	12.50%	0.997	100.30%
Product or Wkstn C	3.00%	\$67,500	\$22,500	\$3,000	NA	1.046	95.40%

Fig. 1D

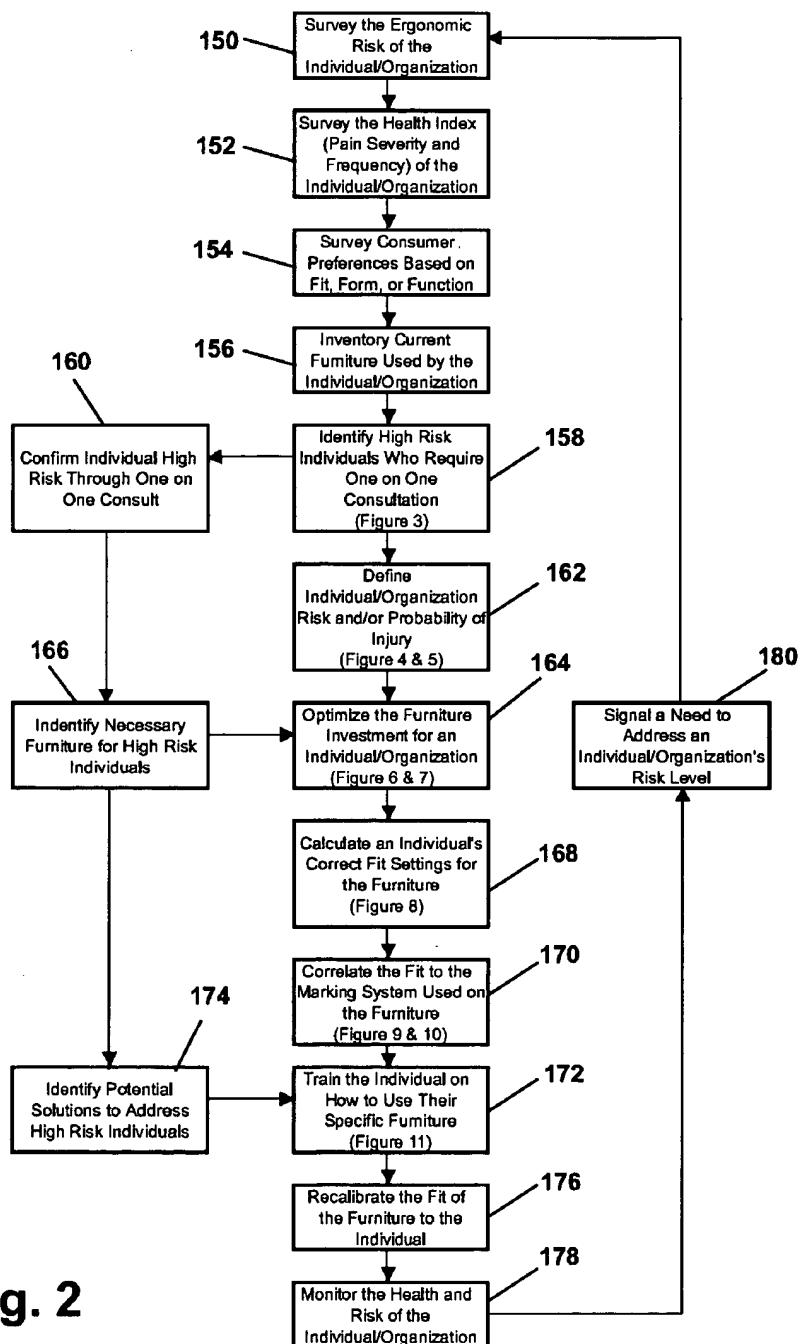
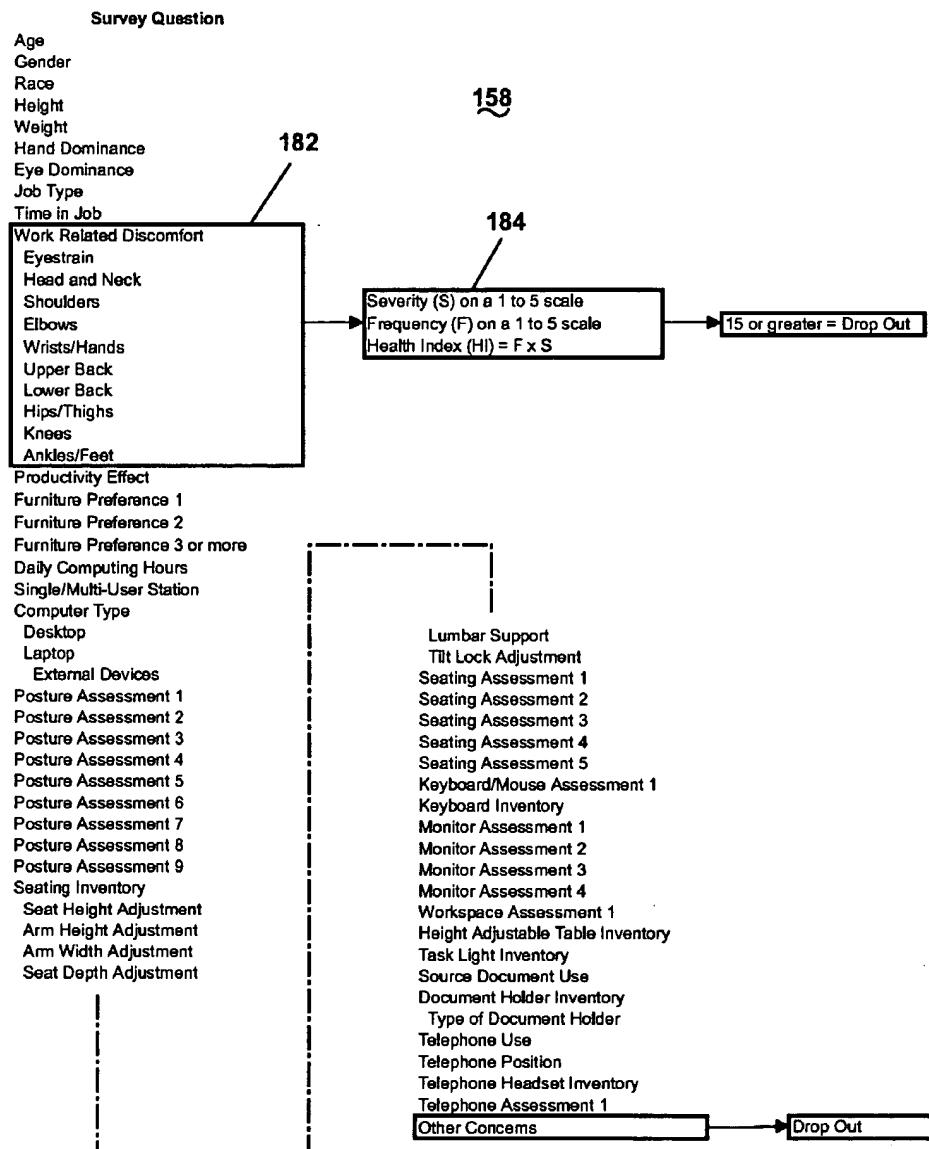


Fig. 2

**Fig. 3**

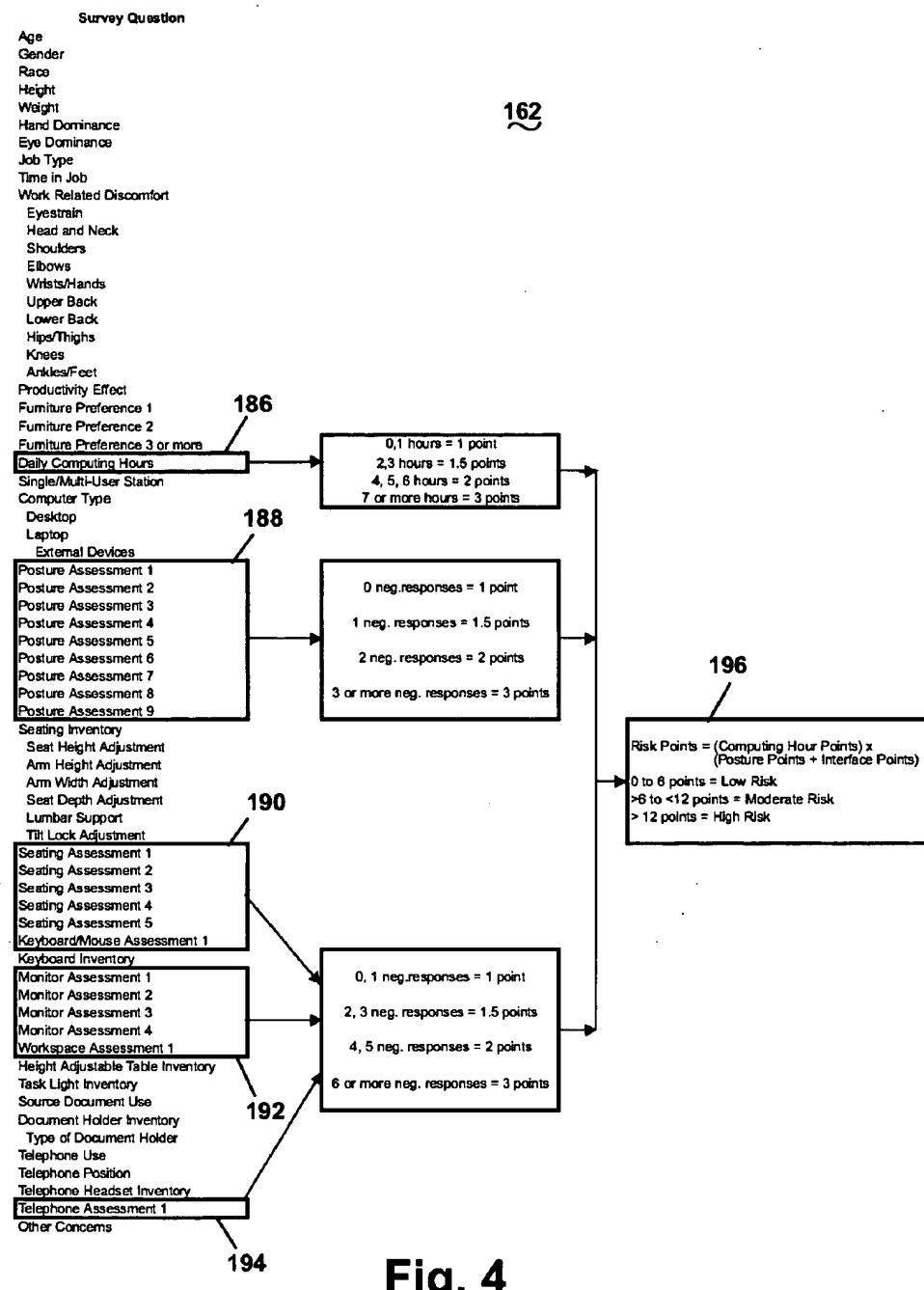


Fig. 4

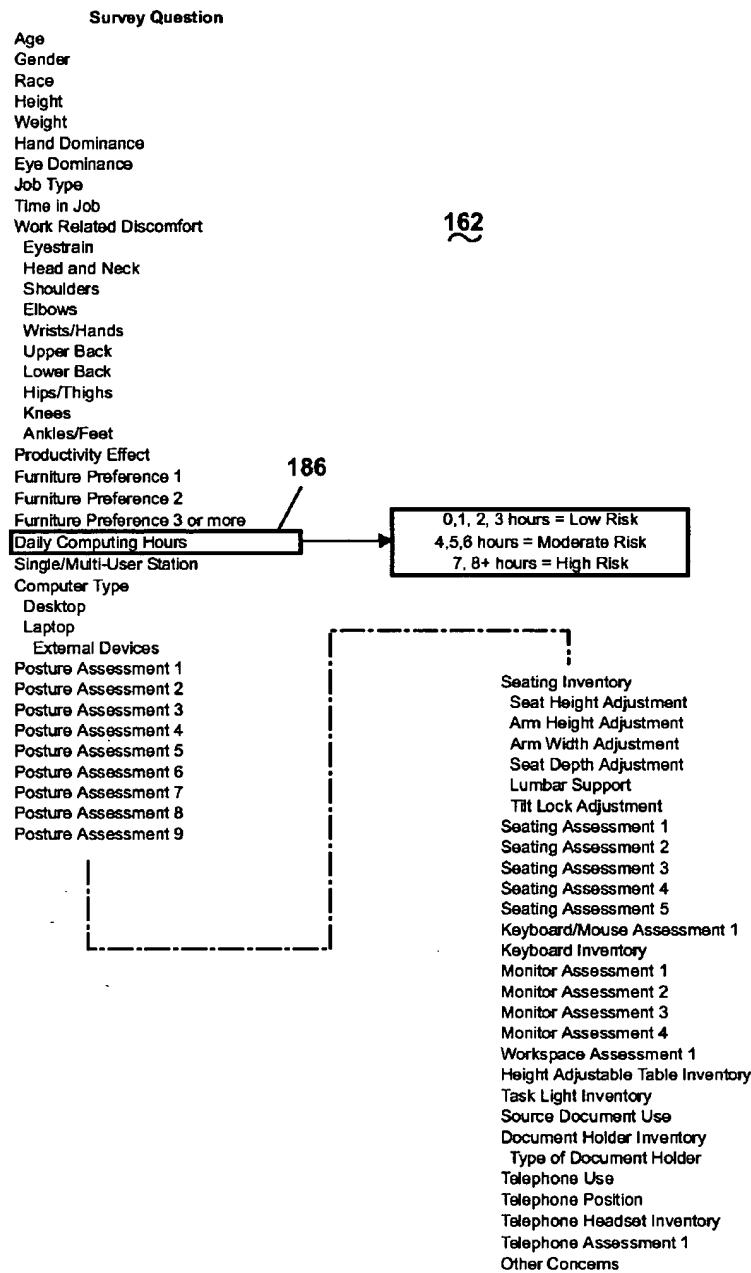


Fig. 5

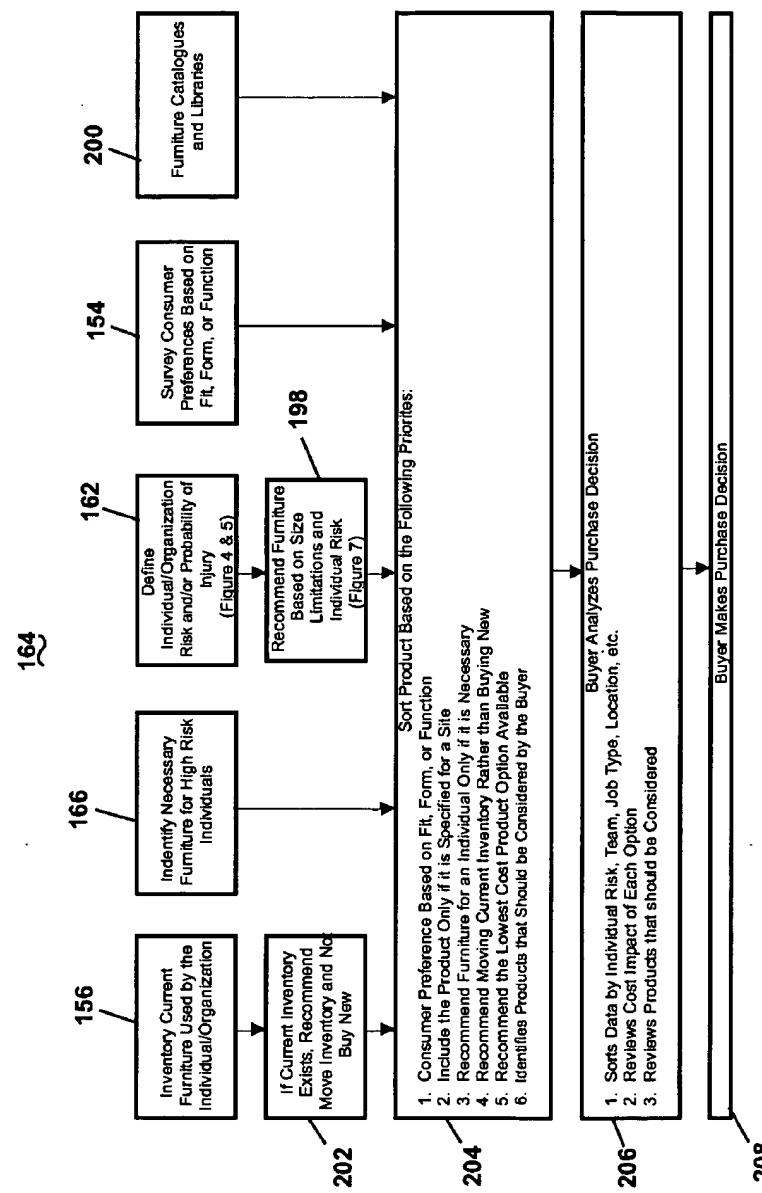


Fig. 6

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Size Limitations		Standard Product	Limited Options	Big/Tall Product
Height	Width/Depth	Chairs	Product Dependent Product Dependent	Product Dependent Product Dependent
Individual Risk			Low Risk	Moderate Risk
Chairs				High Risk
Seat Height Adjustability Arm Height Adjustability Arm Width Adjustability Lumbar/Back Height Adjustability Tilt Lock Fitted Seat Pan or Seat Depth Adjustability Seat Depth Adjustability				
Work Surface				
Seat Height Pan Height Pin Adjustable Crank Adjustable Tension Adjustable Electric Adjustable Sit to Stand		Panel Hung Free Standing	Panel Hung Free Standing Multi-user Multi-user Multi-user Optional	Panel Hung From Standing Multi-user Multi-user Multi-user Optional
Keyboard Mechanism				
Recommended				
Peripherals				
External Keyboard and Mouse External Monitor Laptop or Monitor Riser Document Holder Task Light Phone Head Set Foot Rest			Laptop User Situation Dependent >2 hrs source document use >2 hrs source document use >2 hrs telephone use If feet do not rest on floor	Laptop User Situation Dependent >2 hrs source document use >2 hrs source document use >2 hrs telephone use If feet do not rest on floor

Fig. 7

Survey Question	
Age	
Gender	
Race	
Height (HT) in inches	
Weight (WT) in pounds	
Hand Dominance	
Eye Dominance	
Job Type	
Time in Job	
Work Related Discomfort	
Eyestrain	
Head and Neck	
Shoulders	
Elbows	
Wrists/Hands	
Upper Back	
Lower Back	
Hips/Thighs	
Knees	
Ankles/Feet	
Productivity Effect	
Furniture Preference 1	
Furniture Preference 2	
Furniture Preference 3 or more	
Daily Computing Hours	
Single/Multi-User Station	
Computer Type	
Desktop	
Laptop	
External Devices	
Posture Assessment 1	
Posture Assessment 2	
Posture Assessment 3	
Posture Assessment 4	
Posture Assessment 5	
Posture Assessment 6	
Posture Assessment 7	
Posture Assessment 8	
Posture Assessment 9	
Seating Inventory	
Seat Height Adjustment	
Arm Height Adjustment	
Arm Width Adjustment	
Seat Depth Adjustment	
Lumbar Support	
Tilt Lock Adjustment	
Seating Assessment 1	
Seating Assessment 2	
Seating Assessment 3	
Seating Assessment 4	
Seating Assessment 5	
Keyboard/Mouse Assessment 1	
Keyboard Inventory	
Monitor Assessment 1	
Monitor Assessment 2	
Monitor Assessment 3	
Monitor Assessment 4	
Workspace Assessment 1	
Height Adjustable Table Inventory	
Task Light Inventory	
Source Document Use	
Document Holder Inventory	
Type of Document Holder	
Telephone Use	
Telephone Position	
Telephone Headset Inventory	
Telephone Assessment 1	
Other Concerns	

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Definitions
Seat Height (SH)
Arm Height (AH)
Seat Depth (SD)
Work Surface Height Sitting (WSHSIT)
Keyboard Mechanism Height Sitting (KMHST)
Keyboard Mechanism Tilt (KMT)
Back Tilt (BT)
Document Holder (DH)
Task Light (TL)
Telephone (T)
Seat Height Calculated (SHC)
Arm Height Calculated (AHC)
Seat Depth Calculated (SDC)
Base Calculations
White Male
$SH = (HT \times 0.3491) + (WT \times -0.0070) - 5.9938 + 2.0000$
$AH = (HT \times 0.0254) + (WT \times 0.0197) + 5.8926 - 2.2500$
$SD = (HT \times 0.2663) + (WT \times 0.0072) - 0.1087$
Black Male
$SH = (HT \times 0.3699) + (WT \times -0.0107) - 6.2544 + 2.000$
$AH = (HT \times -0.0095) + (WT \times 0.0129) + 6.5716$
$SD = (HT \times 0.2890) + (WT \times 0.0060) - 0.8039$
Hispanic Male
$SH = (HT \times 0.3499) + (WT \times -0.0084) - 5.6054 + 2.000$
$AH = (HT \times 0.0162) + (WT \times 0.0142) + 7.8924 - 2.2500$
$SD = (HT \times 0.2817) + (WT \times 0.0060) - 0.9187$
Asian Male
$SH = (HT \times 0.3363) + (WT \times -0.0061) - 5.4129 + 2.000$
$AH = (HT \times 0.0249) + (WT \times 0.0071) + 6.6508 - 2.2500$
$SD = (HT \times 0.2724) + (WT \times 0.0050) - 0.4282$
All Male
$SH = (HT \times 0.3471) + (WT \times -0.0074) - 5.6982 + 2.000$
$AH = (HT \times -0.0167) + (WT \times 0.0104) + 6.3239 - 2.2500$
$SD = (HT \times 0.2743) + (WT \times 0.0068) - 0.5368$
White Female
$SH = (HT \times 0.3440) + (WT \times -0.0134) - 5.1168 + 3.272$
$AH = (HT \times 0.0488) + (WT \times 0.0082) + 4.9521 - 0.5000$
$SD = (HT \times 0.2579) + (WT \times 0.0100) + 0.7331$
Black Female
$SH = (HT \times 0.3730) + (WT \times -0.0141) - 6.3841 + 3.272$
$AH = (HT \times 0.0320) + (WT \times 0.0093) + 4.6876 - 0.5000$
$SD = (HT \times 0.2743) + (WT \times 0.0106) + 0.3594$
Hispanic Female
$SH = (HT \times 0.3418) + (WT \times -0.0131) - 4.8748 + 3.272$
$AH = (HT \times 0.0428) + (WT \times 0.0058) + 5.3539$
$SD = (HT \times 0.2604) + (WT \times 0.0137) + 0.2194$
Asian Female
$SH = (HT \times 0.2972) + (WT \times 0.0053) - 1.4922 + 3.272$
$AH = (HT \times -0.0059) + (WT \times 0.01091) + 8.0581 - 0.5000$
$SD = (HT \times 0.2724) + (WT \times 0.0050) - 0.4282$
All Female
$SH = (HT \times 0.3456) + (WT \times -0.0128) - 5.2211 + 3.272$
$AH = (HT \times 0.0516) + (WT \times 0.0070) + 4.7553 - 0.5000$
$SD = (HT \times 0.2627) + (WT \times 0.0109) + 0.4044$
Rounding Adjustment
WSHSIT rounds to 1" increments
If WSHSIT value is <x.750 round down to the inch increment
If WSHSIT value is > or = to x.750 round up to the inch increment
SH rounds to 0.250" increments
SH always move down to the 0.250" increment below SHC
SD rounds to 0.250" increments
SD always move down to the 0.250" increment below SDC
AH rounds to 0.500" increments
AH always move down to the 0.500" increment below AHC

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To Fig. 8
cont.To Fig. 8
cont.

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Fig. 8

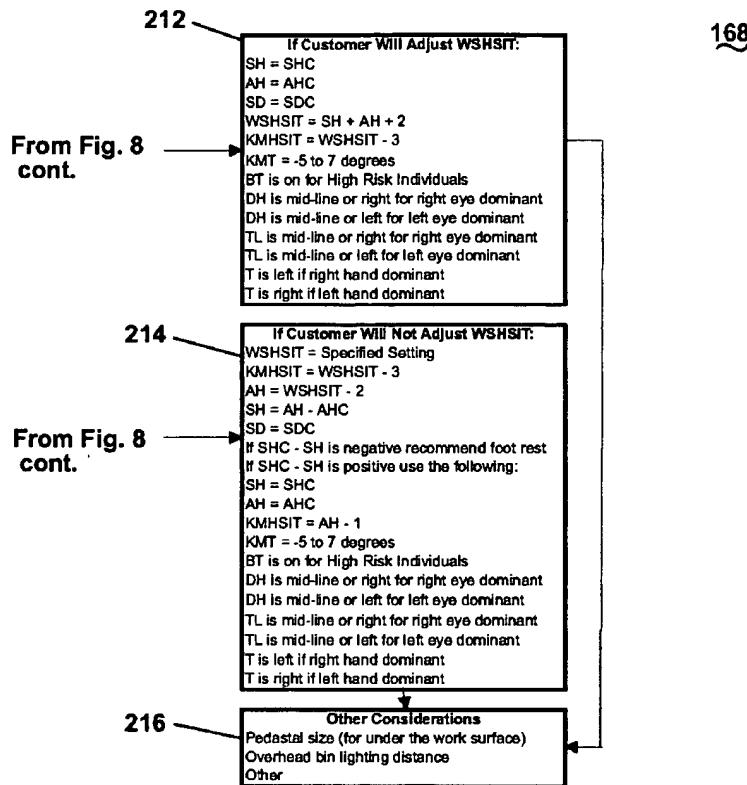


Fig. 8 cont.

Worksurface Height-seated		
1.00" increments		
inches	scale	color
<=27.00		
27.00	1.0	orange
28.00	3.0	lavender
29.00	5.0	light yellow
30.00	7.0	blue
31.00	9.0	gold
32.00	11.0	green
>=32.00		
Worksurface Height-standing		
1.00" increments		
inches	scale	color
TBD		
TBD	1.0	orange
TBD	3.0	lavender
TBD	5.0	light yellow
TBD	7.0	blue
TBD	9.0	gold
TBD	11.0	green
TBD		
Seat Height		
0.25" increments		
inches	scale	color
<=15.00		
15.00	-1.0	rose
15.25	-1.0	rose
15.50	0.0	rose
15.75	0.0	orange
16.00	1.0	orange
16.25	1.0	orange
16.50	2.0	orange
16.75	2.0	lavender
17.00	3.0	lavender
17.25	3.0	lavender
17.50	4.0	lavender
17.75	4.0	light yellow
18.00	5.0	light yellow
18.25	5.0	light yellow
18.50	6.0	light yellow
18.75	6.0	blue
19.00	7.0	blue
19.25	7.0	blue
19.50	8.0	blue
19.75	8.0	gold
20.00	9.0	gold
20.25	9.0	gold
20.50	10.0	gold
20.75	10.0	green
21.00	11.0	green
>=21.00		
Arm Height		
0.50" increments		
inches	scale	color
<=7.0	1.0	orange
7.00	1.0	orange
7.50	2.0	orange
8.00	3.0	lavender
8.50	4.0	lavender
9.00	5.0	light yellow
9.50	6.0	light yellow
10.00	7.0	blue
10.50	8.0	blue
11.00	9.0	gold
>=11.00		

Seat Depth		
0.25" increments		
inches	scale	color
<=17.00		
17.00	1.00	lavender
17.25	1.00	lavender
17.50	2.00	lavender
17.75	2.00	light yellow
18.00	3.00	light yellow
18.25	3.00	blue
18.50	4.00	blue
18.75	4.00	blue
19.00	5.00	blue
>=19.00	5.00	blue

Keyboard Height-seated		
1.00" increments		
<= -4.00		Red
-4.00		Yellow
-3.00		Green
-2.00		Yellow
-1.00		Yellow
0.00		Red
>= 0.00		Red

Keyboard Height-standing		
1.00" increments		
<= -4.00		TBD
-4.00		TBD
-3.00		TBD
-2.00		TBD
-1.00		TBD
0.00		TBD
>= 0.00		TBD

Keyboard Tilt		
1 degree increments		
<= 0		Red
0 degrees		Yellow
-1 degrees		Yellow
-2 degrees		Yellow
-3 degrees		Yellow
-4 degrees		Yellow
-5 degrees		Green
-6 degrees		Green
-7 degrees		Green
-8 degrees		Yellow
-9 degrees		Yellow
-10 degrees		Yellow
-11 degrees		Yellow
-12 degrees		Yellow
>= -12 degrees		Red

Fig. 9

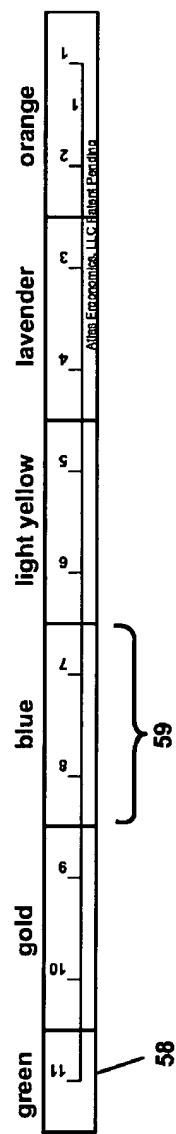


Fig. 10

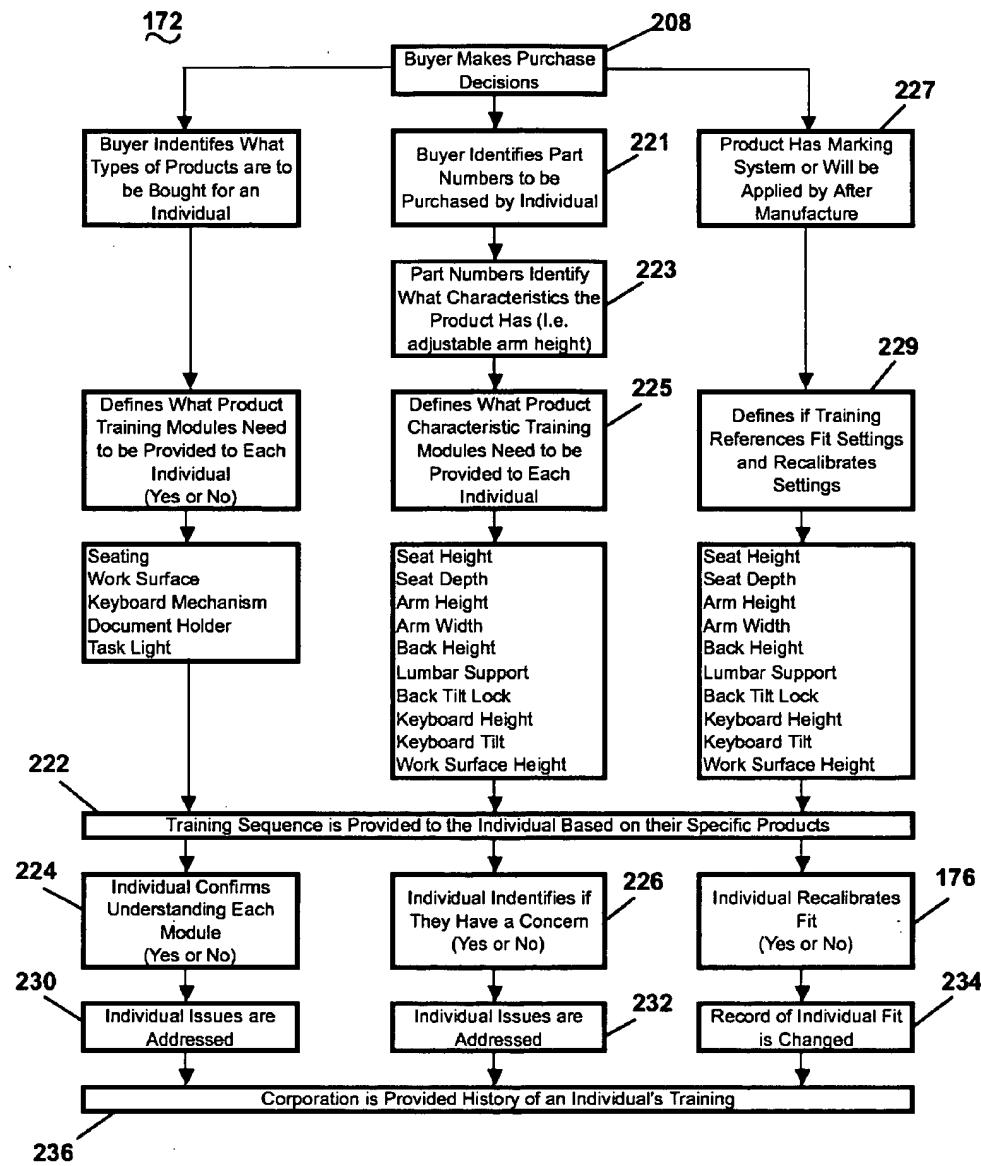


Fig. 11

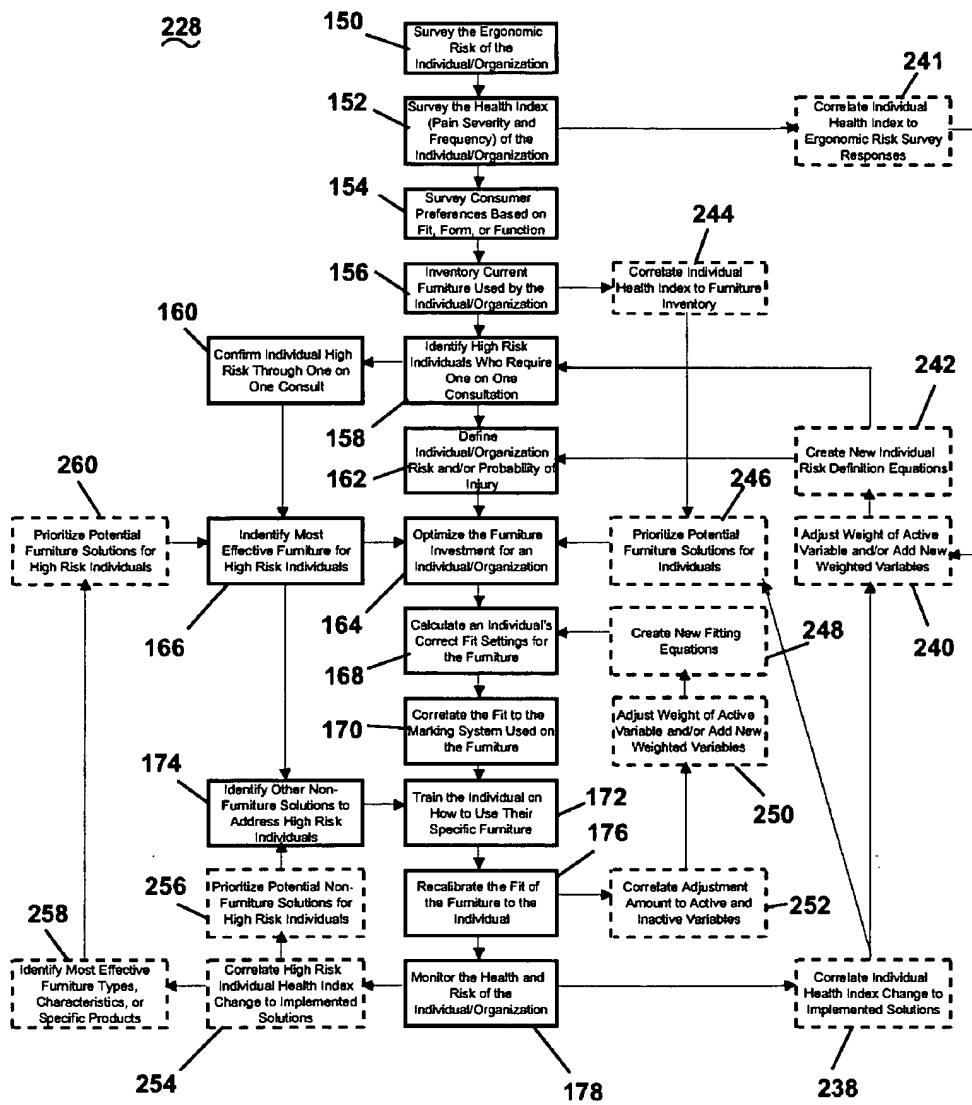


Fig. 12

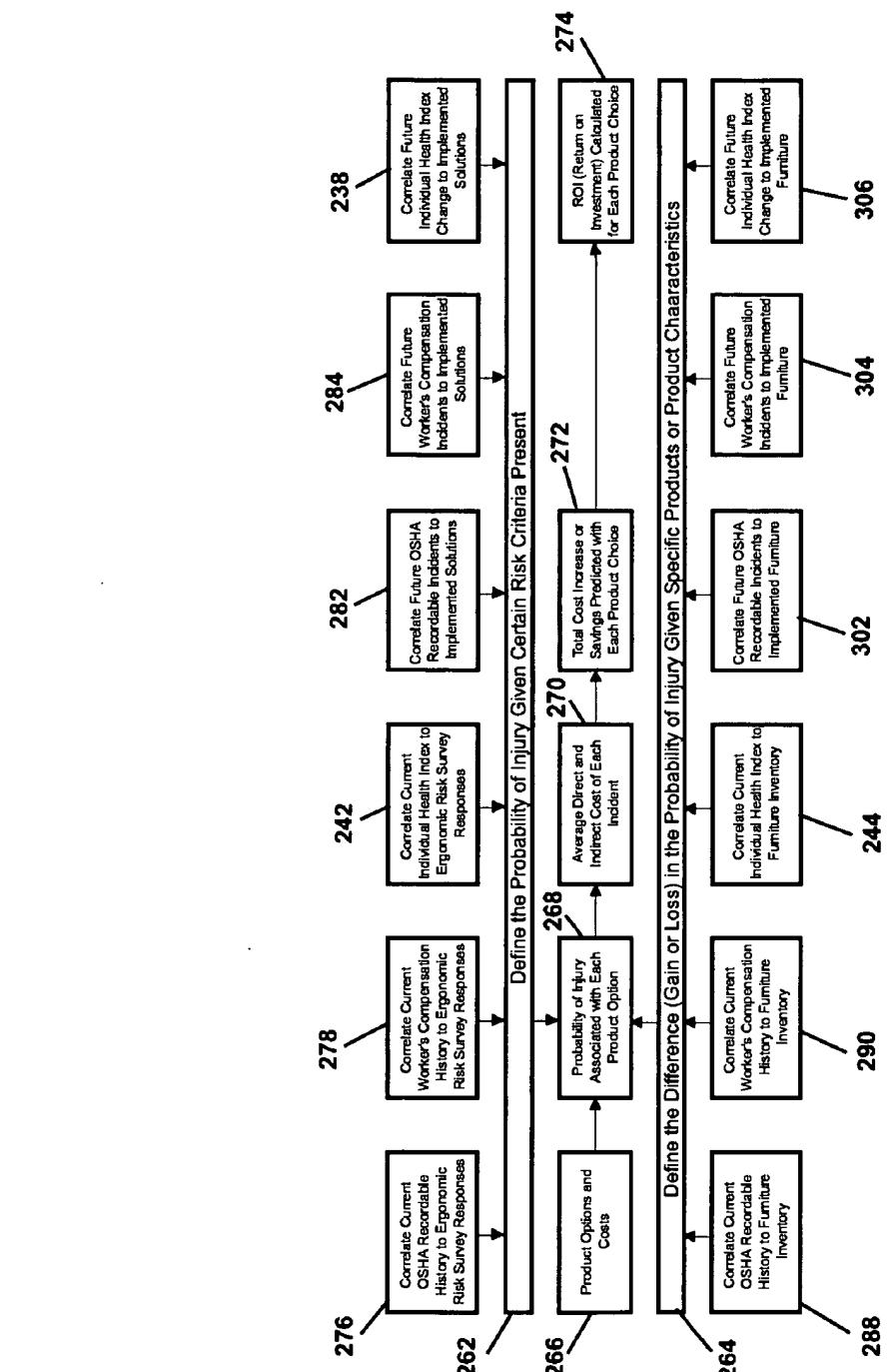


Fig. 13

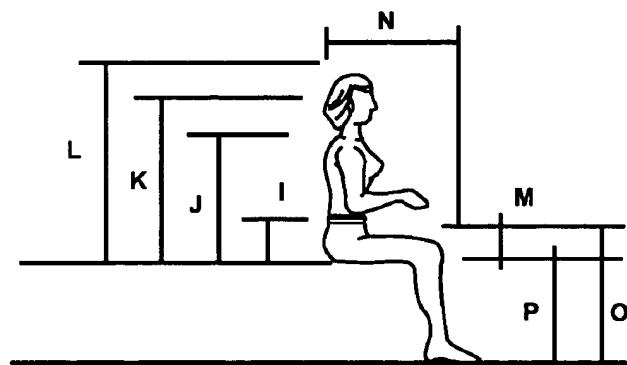


Fig. 14

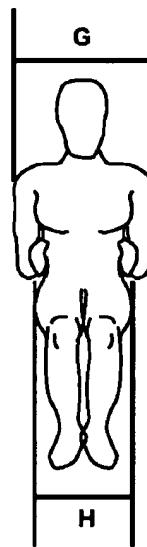


Fig. 15

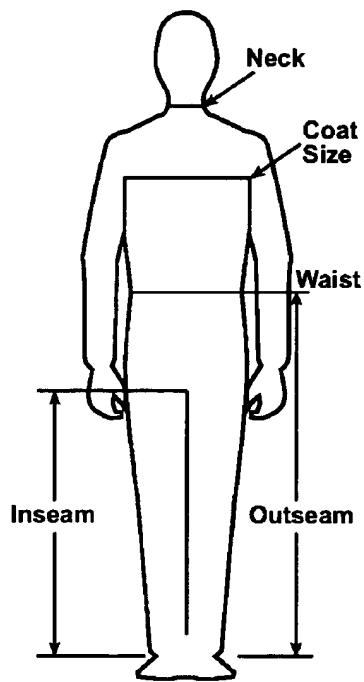


Fig. 16

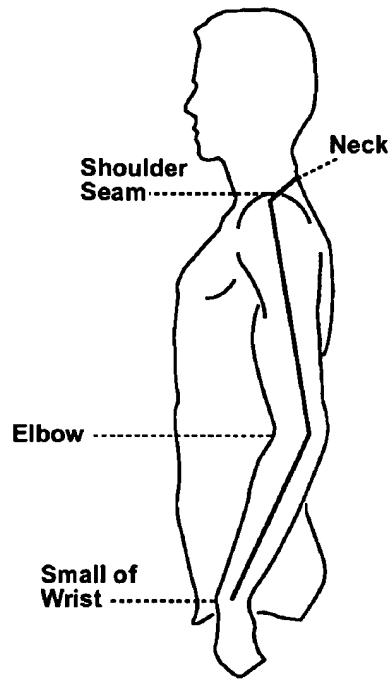


Fig. 17

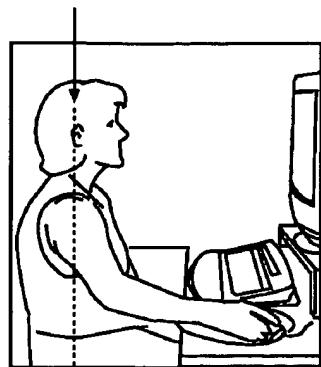


Fig. 18

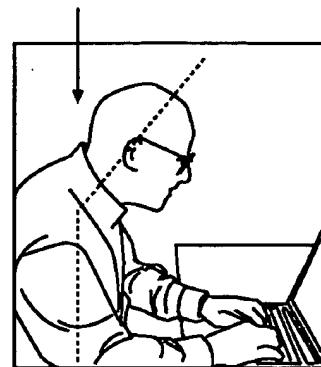


Fig. 19

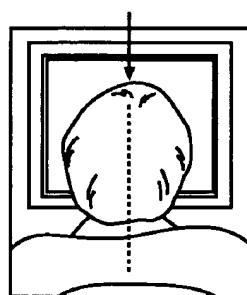


Fig. 20

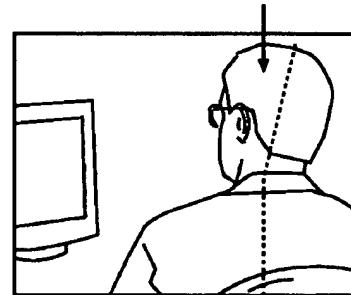


Fig. 21

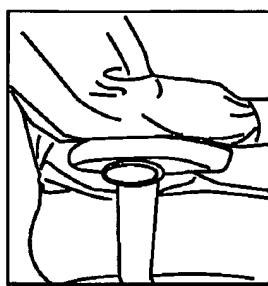


Fig. 22

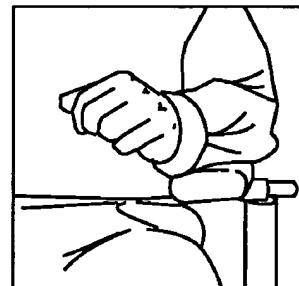


Fig. 23

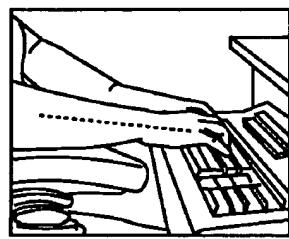


Fig. 24

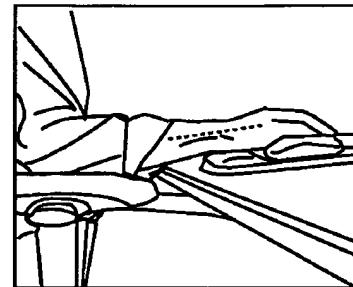


Fig. 25

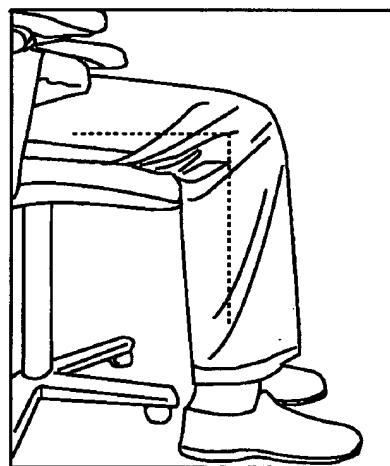


Fig. 26



Fig. 27

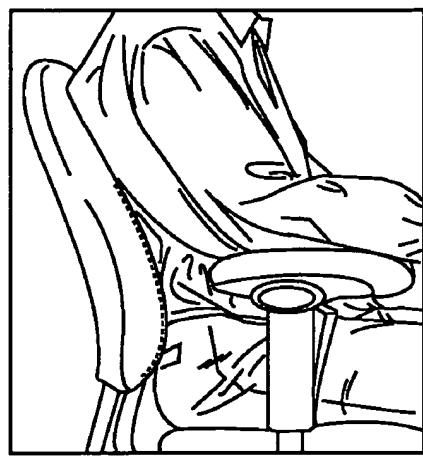


Fig. 28



Fig. 29

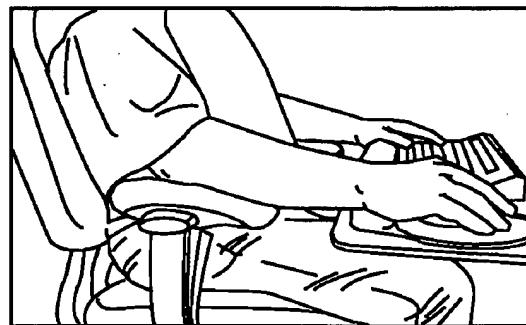


Fig. 30

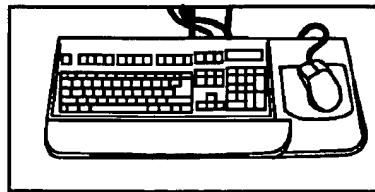


Fig. 31

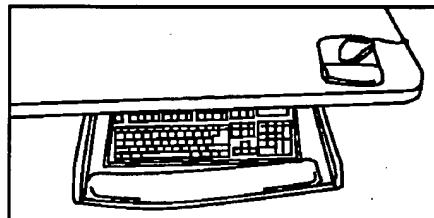
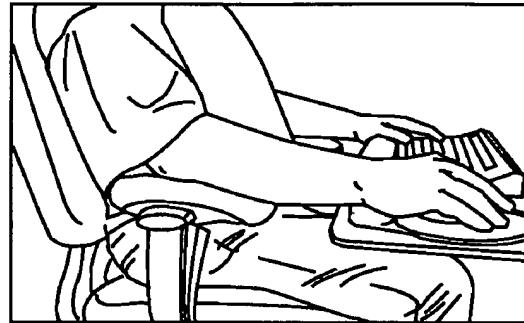


Fig. 32

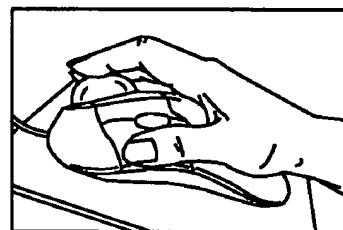


Fig. 33

Fig. 34

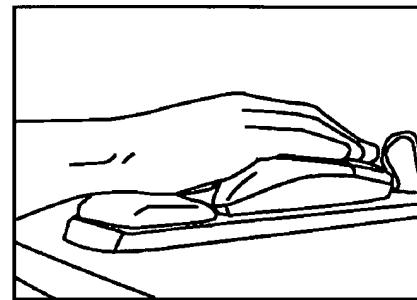


Fig. 35

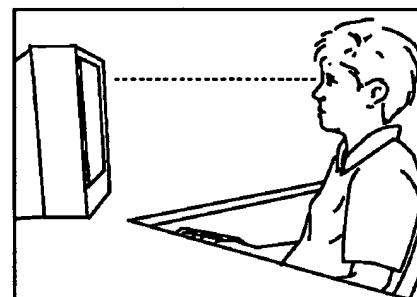


Fig. 36

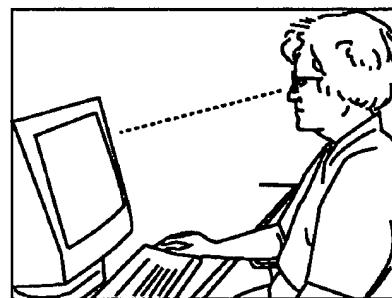


Fig. 37

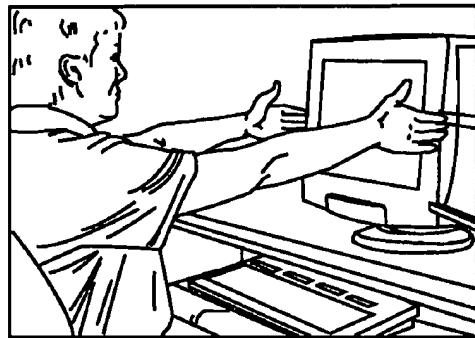


Fig. 38

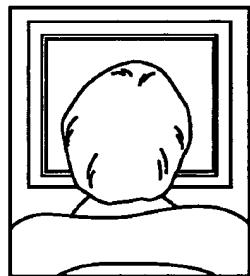


Fig. 39



Fig. 40

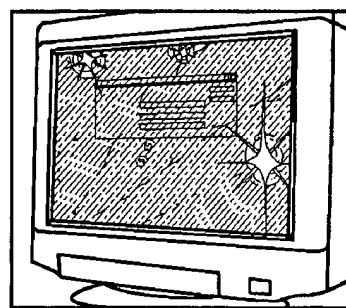


Fig. 41



Fig. 42



Fig. 43

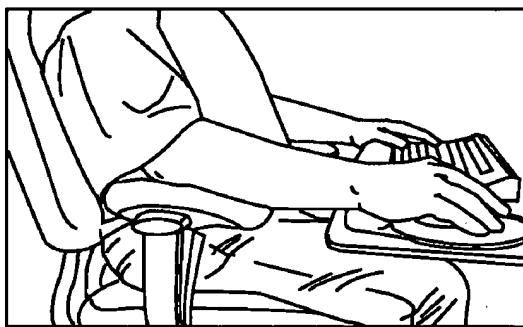


Fig. 44

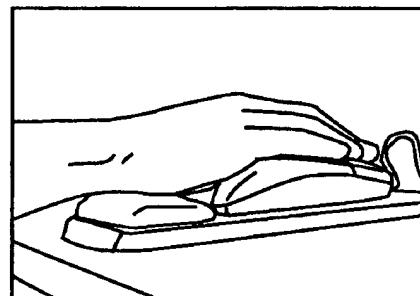


Fig. 45



Fig. 46



Fig. 47

Survey:

- **How long is your typical workday?**
 - < 2 hours
 - 2-4 hours
 - > 4 hours
 - > 8 hours
 - > 10 hours
- **What percentage of your workday are you performing computing tasks?**
 - <10%
 - 10-25%
 - 25-50%
 - 50-75%
 - >75%
- **Beyond your work life, how many hours per day do you typically use the computer at home?**
 - < 1 hour
 - 1-2 hours
 - 2-4 hours
 - > 4 hours
- **With regards to work, who will be using your computer?**
 - Single user (only me)
 - Multiple user (I share my computer with a co-worker)
- **With regards to work, what kind of computer do you use?**
 - Desktop computer
 - Laptop computer
 - Handheld computing / PDA's
- **With regards to work, what kind of work will the computer be used for?**
 - Word processing
 - Graphic design
 - Data entry
 - Surfing the net
 - Games
- **Phone usage**
 - Infrequent (0-10% of workday)
 - Occasional (10-33% of workday)
 - Frequent (33-66% of workday)
 - Constant (>66% of workday)
- **Use of Source Document**
 - Infrequent (0-10% of workday)
 - Occasional (10-33% of workday)
 - Frequent (33-66% of workday)
 - Constant (>66% of workday)

Fig. 48

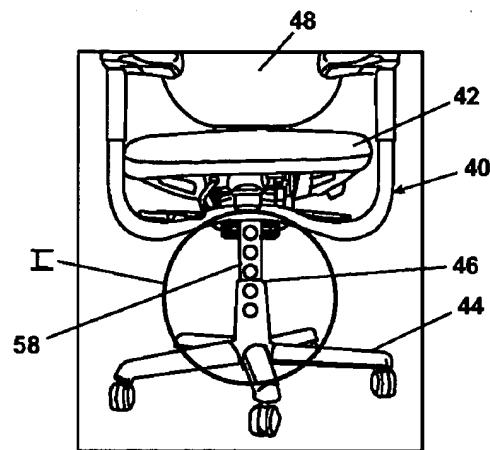


Fig. 49

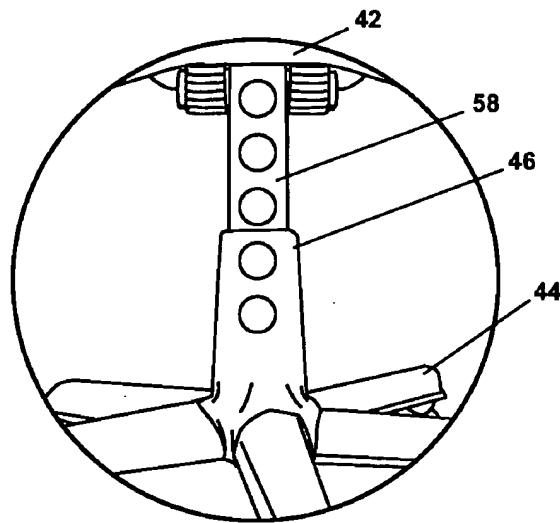


Fig. 50

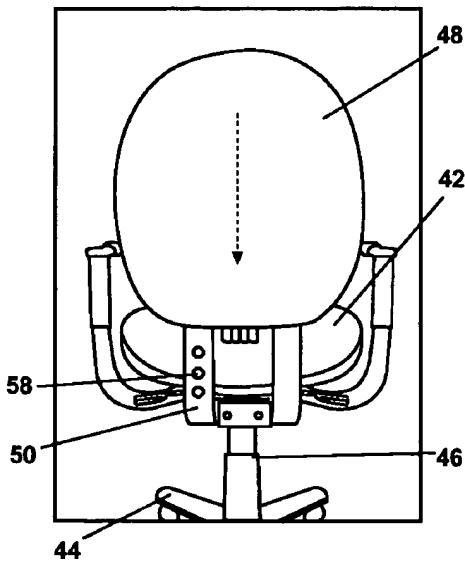


Fig. 51

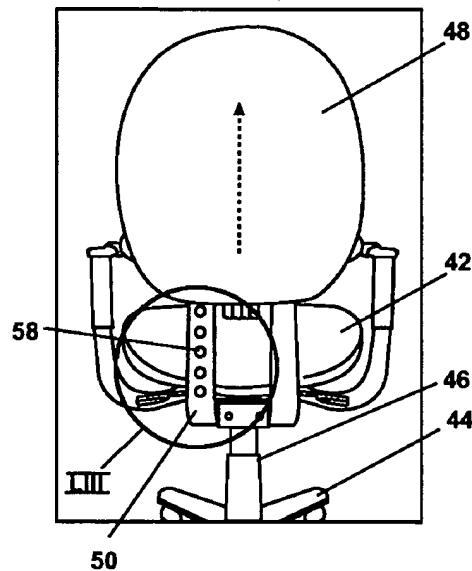


Fig. 52

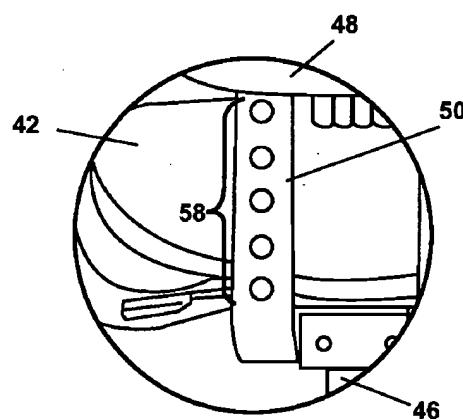


Fig. 53

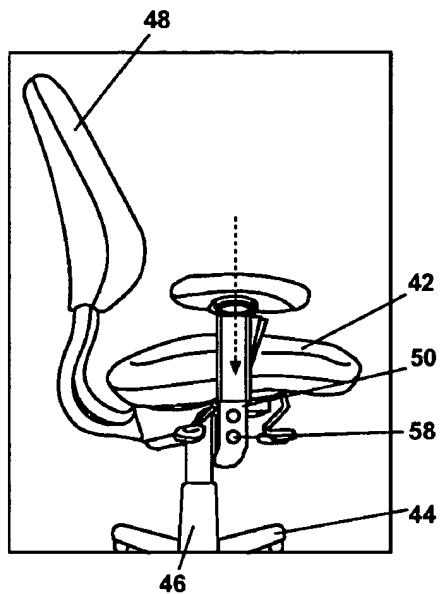


Fig. 54

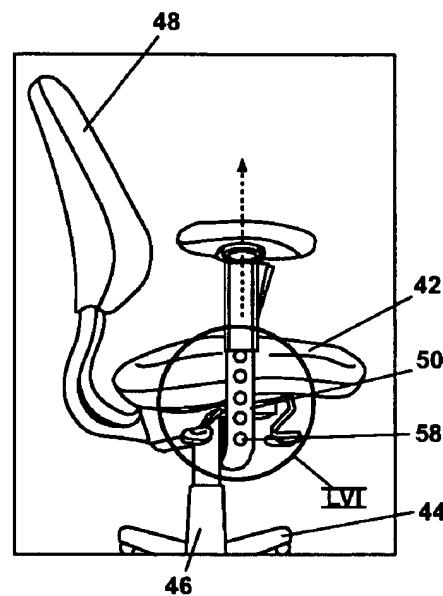


Fig. 55

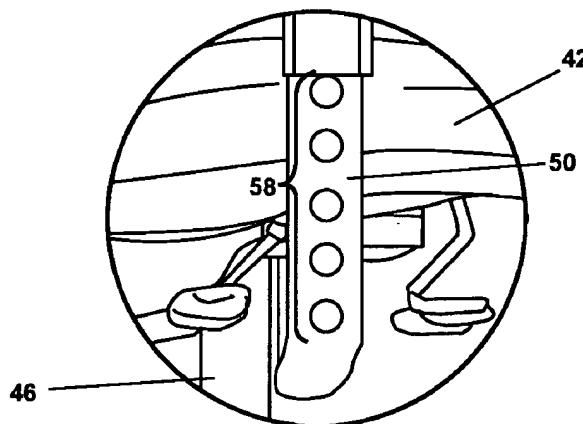


Fig. 56

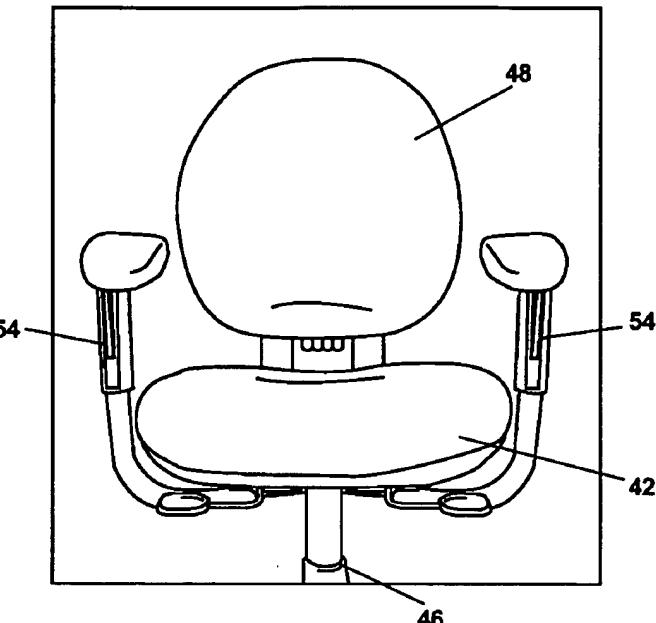


Fig. 57

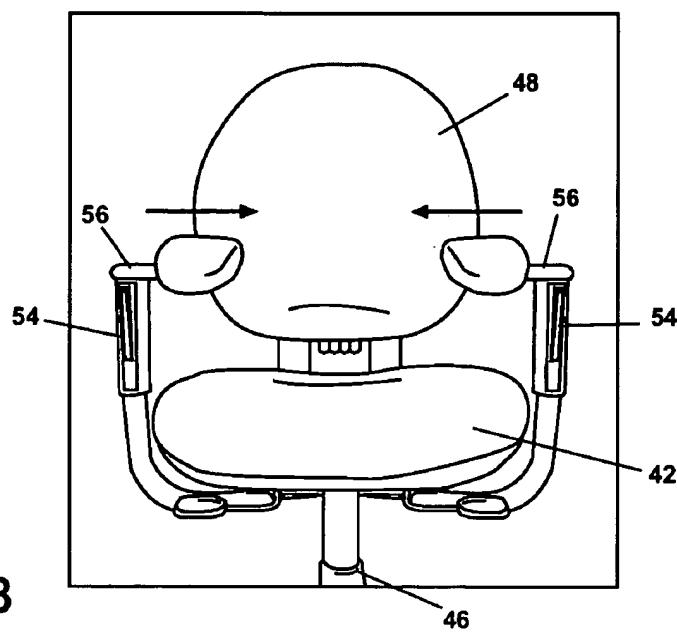


Fig. 58

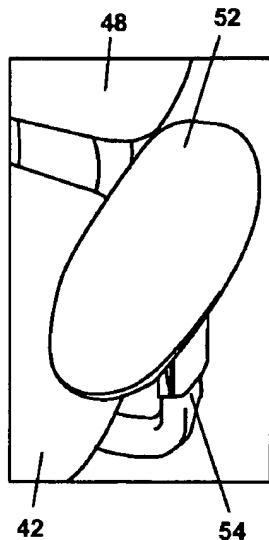


Fig. 59

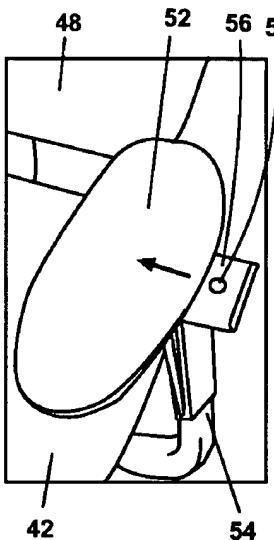


Fig. 60

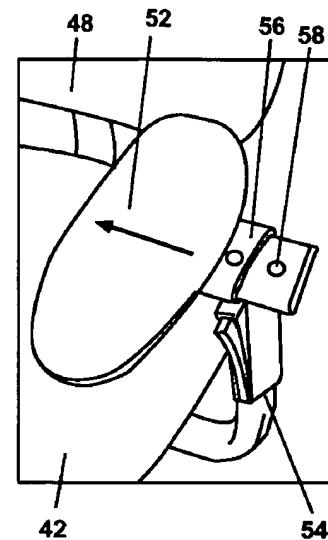
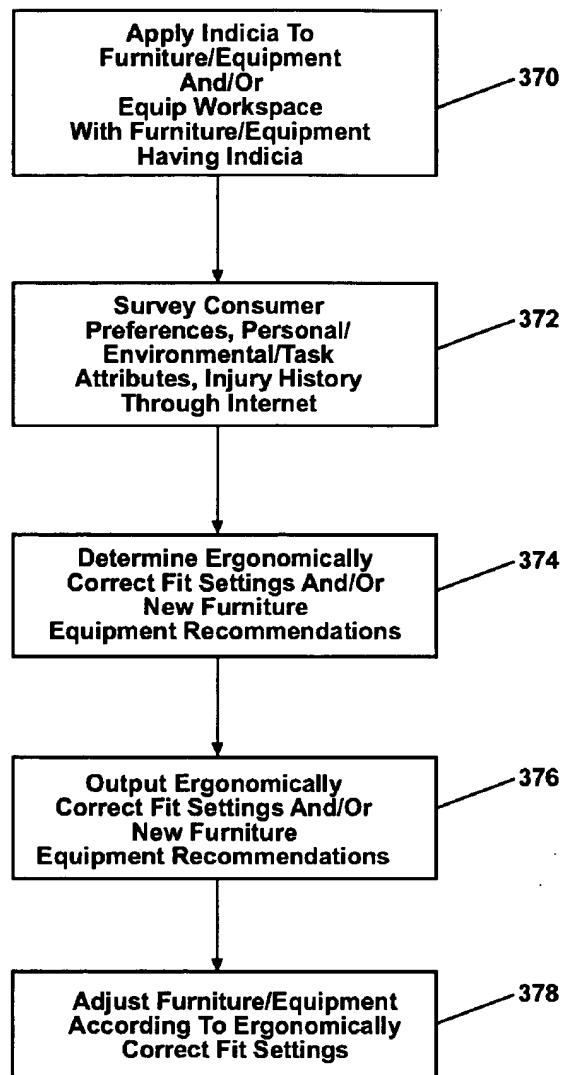


Fig. 61

10

**Fig. 62**

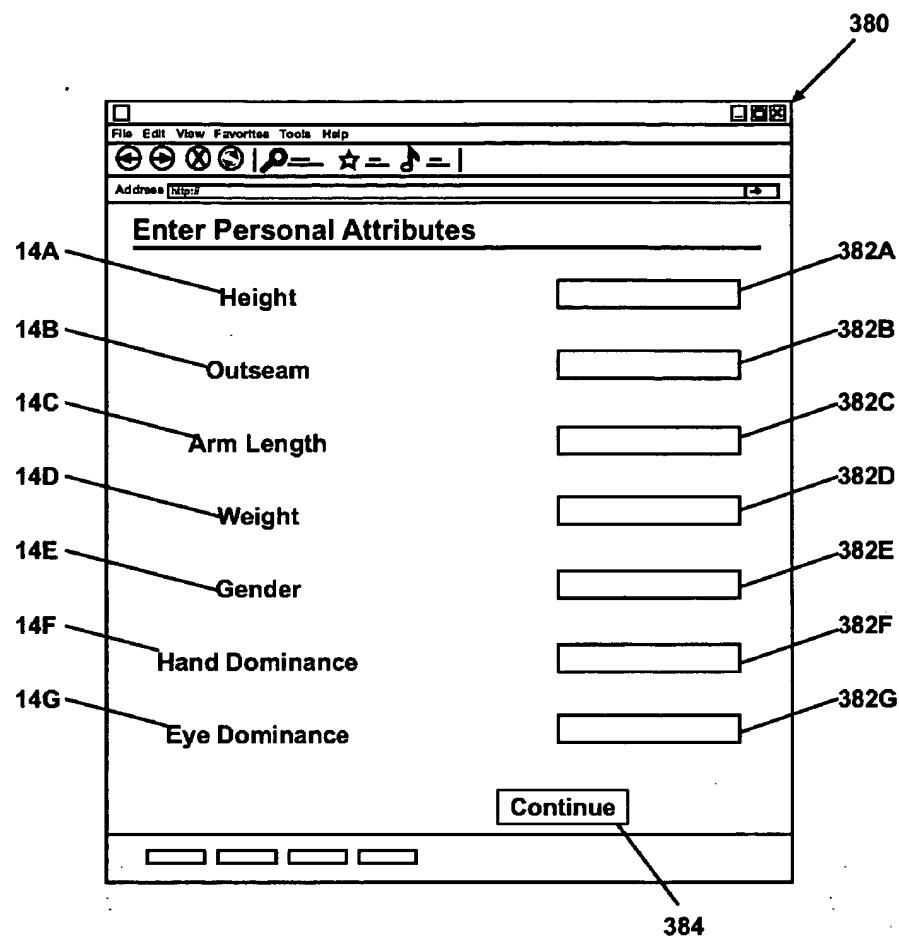


Fig. 63

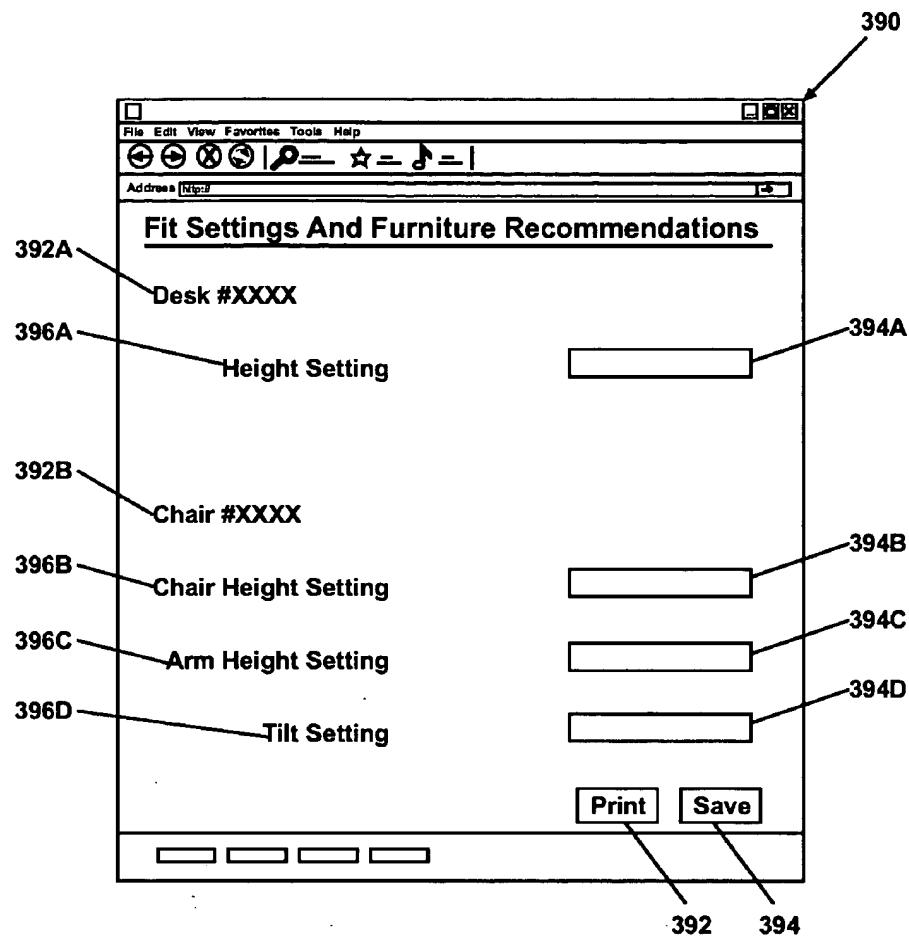


Fig. 64

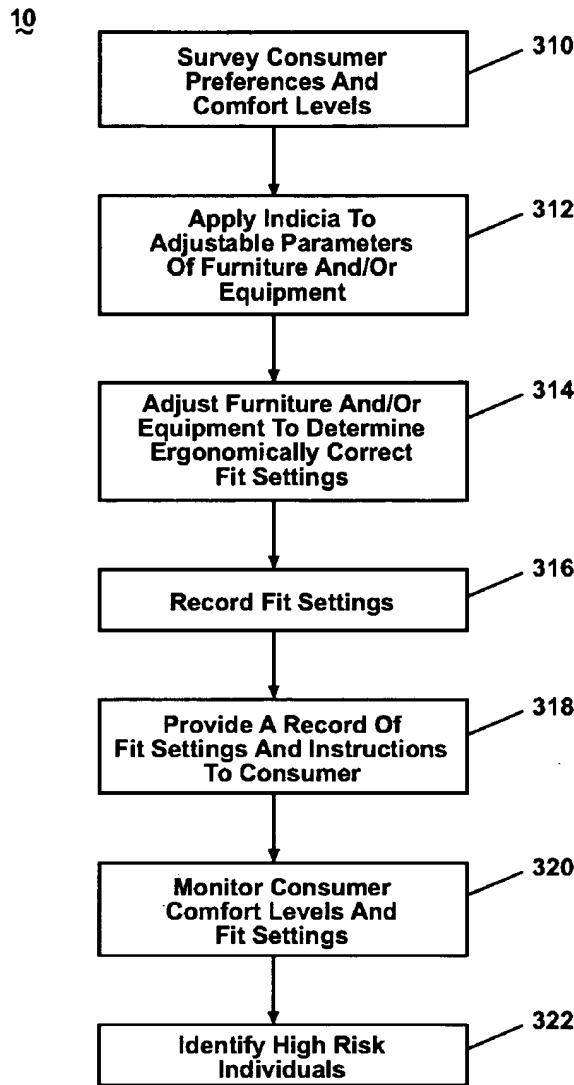


Fig. 65

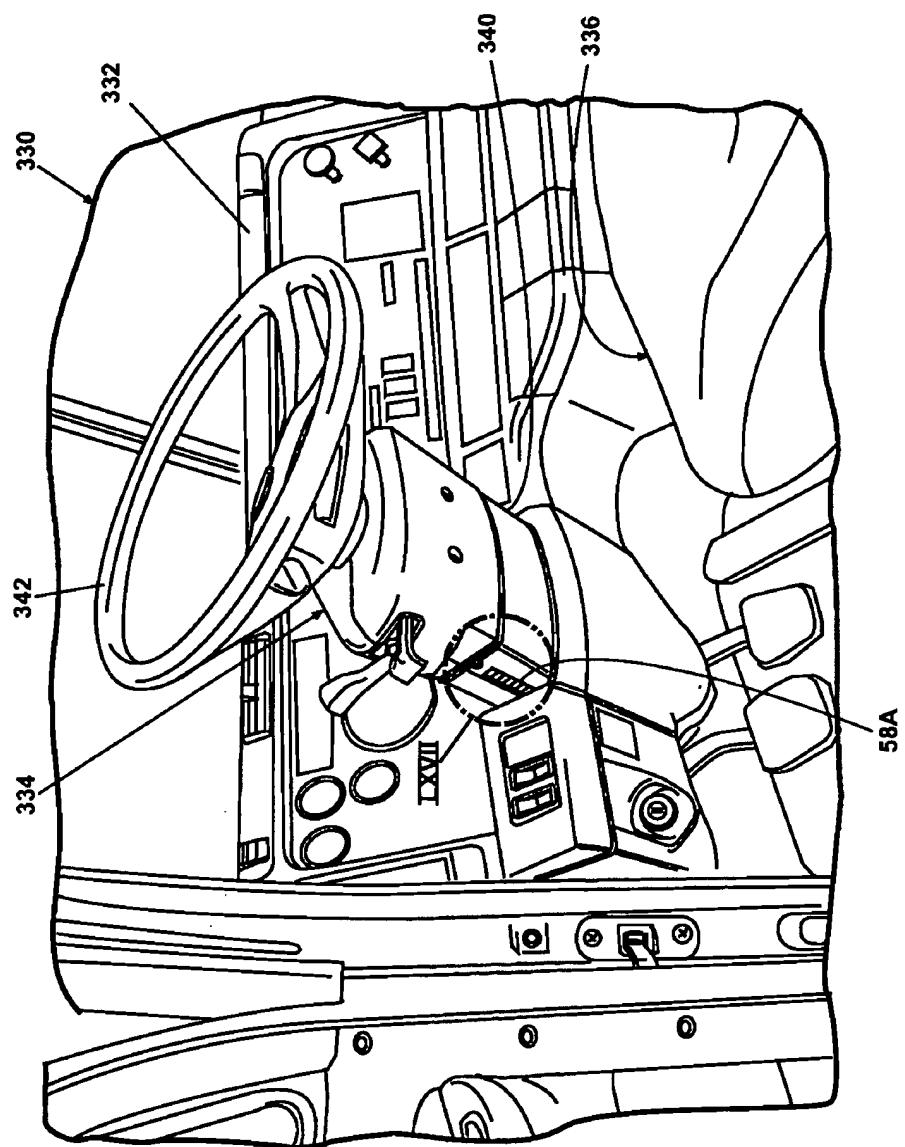


Fig. 66

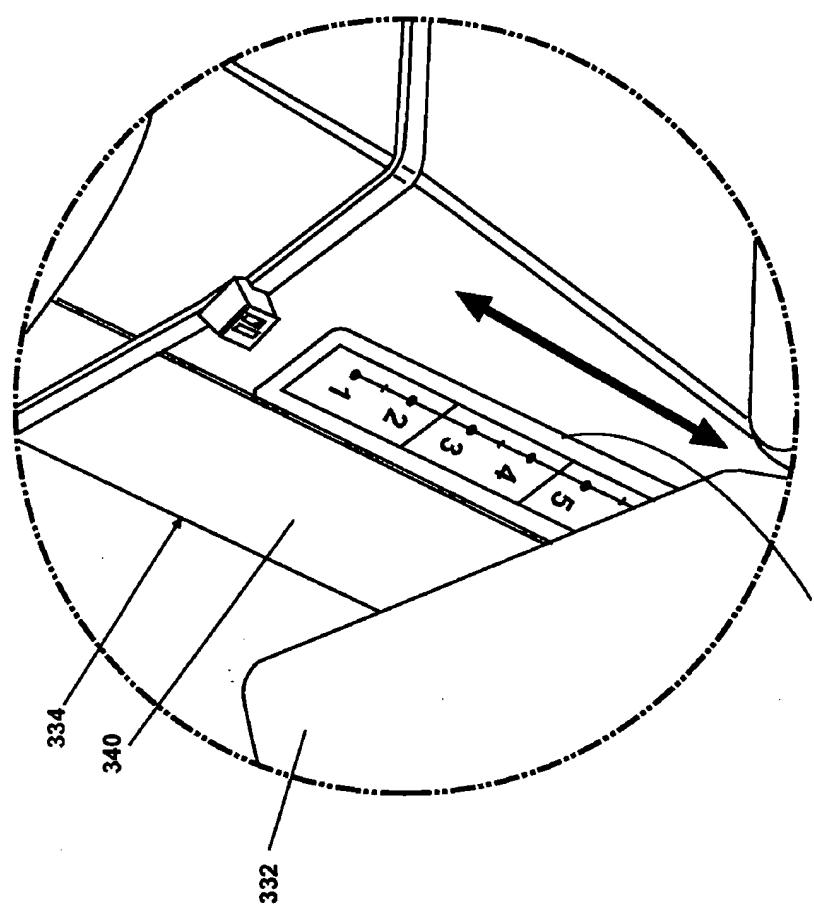


Fig. 67

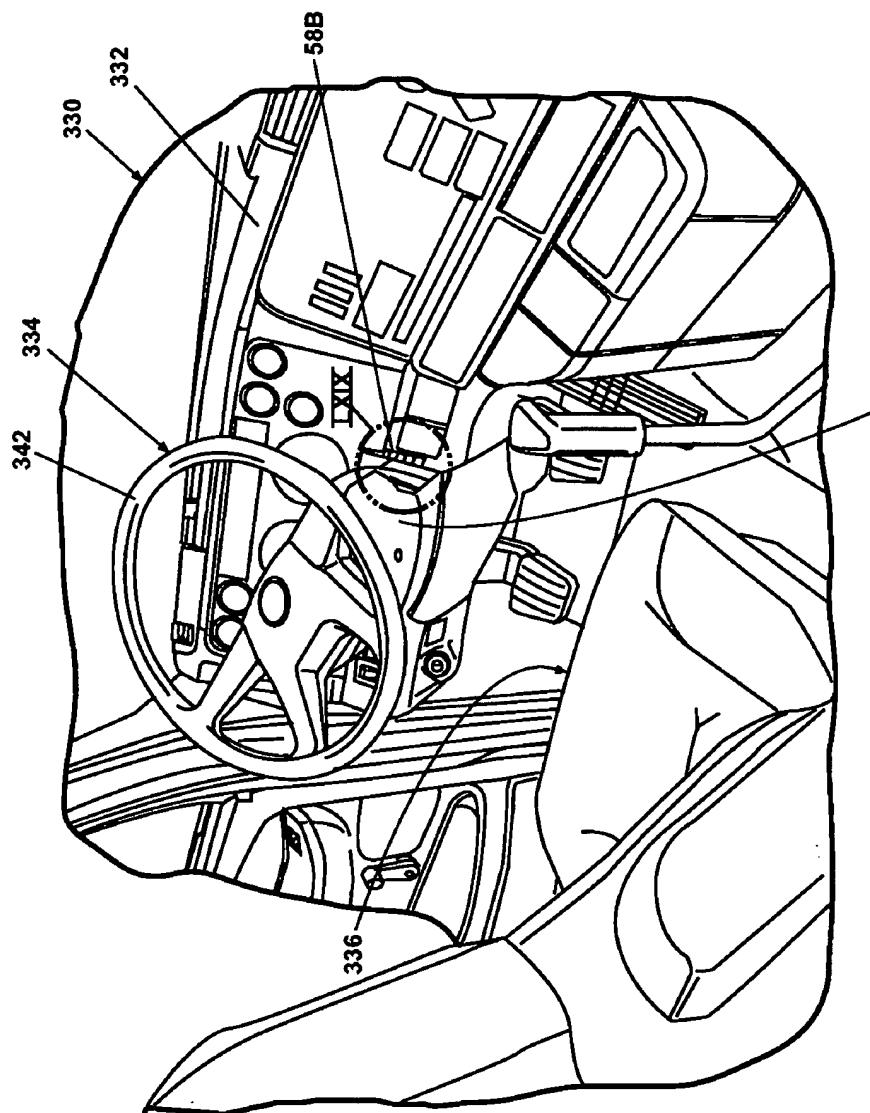
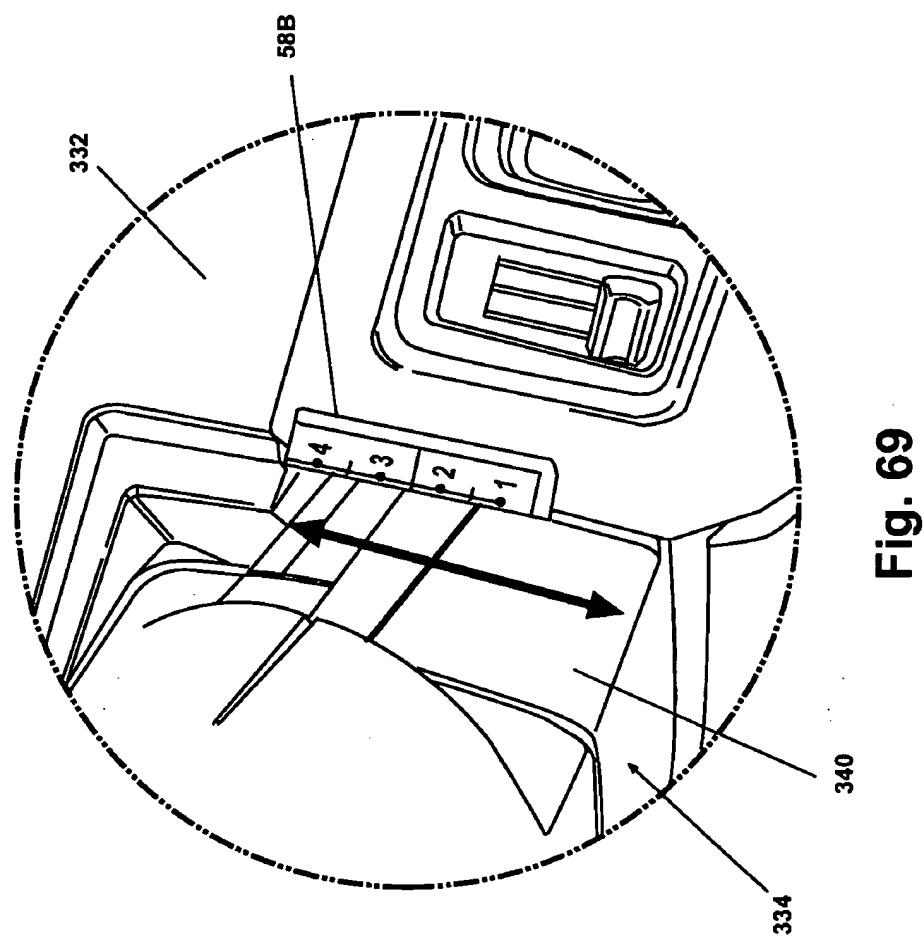


Fig. 68



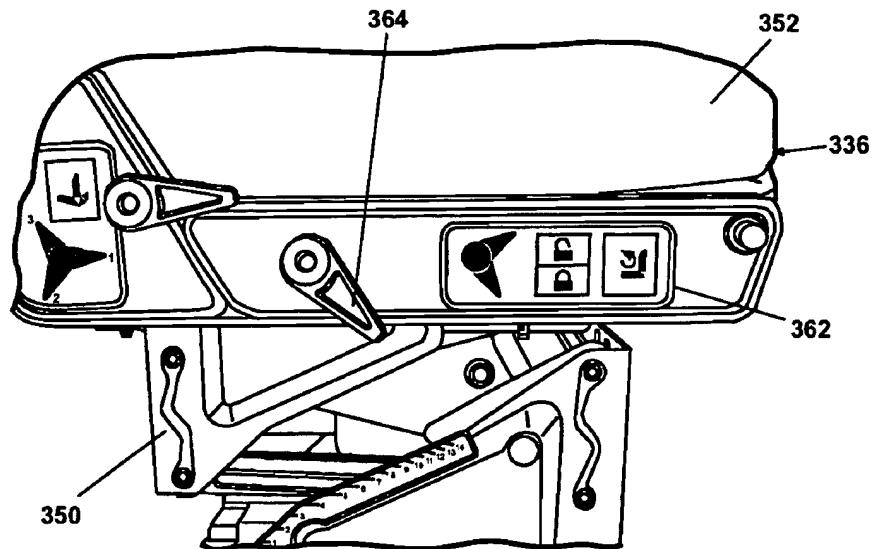


Fig. 70

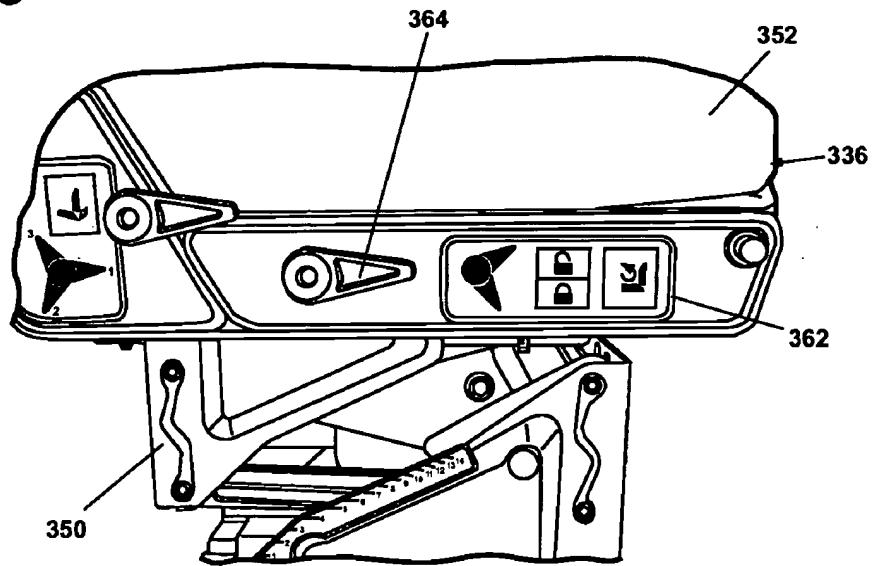


Fig. 71

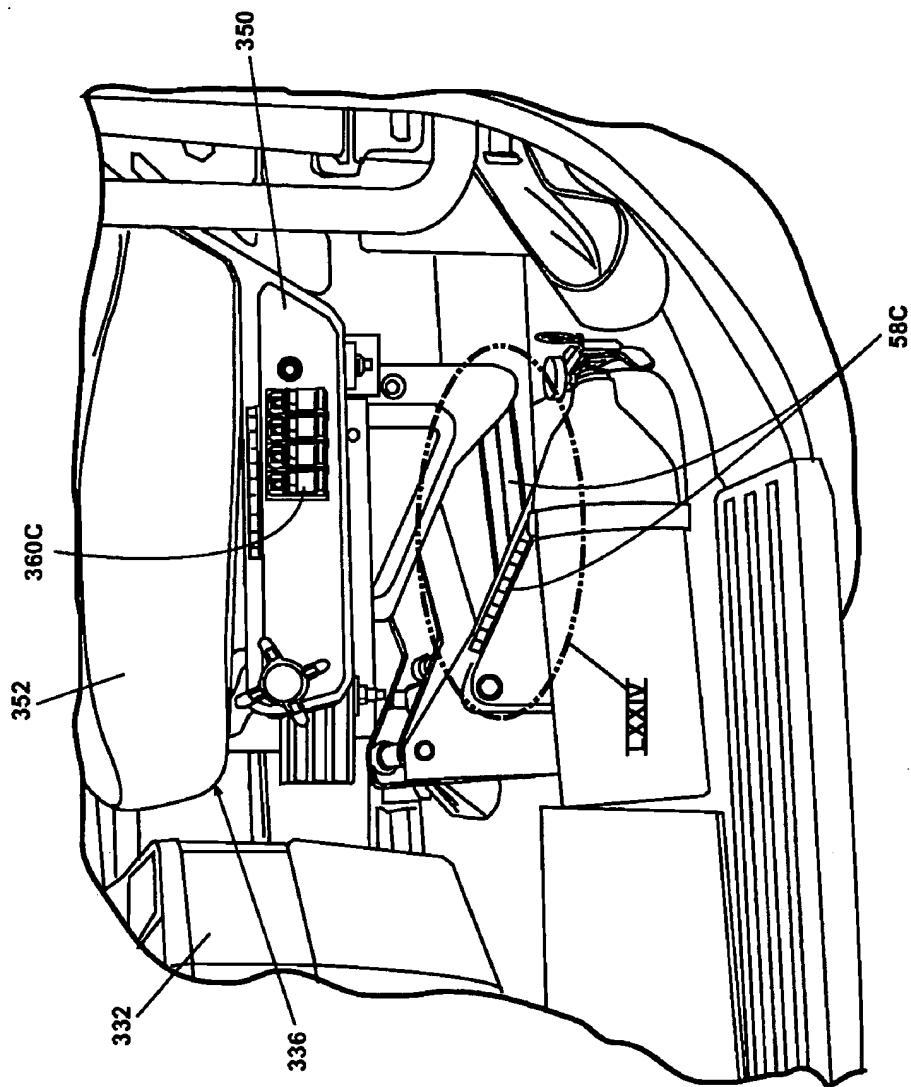


Fig. 72

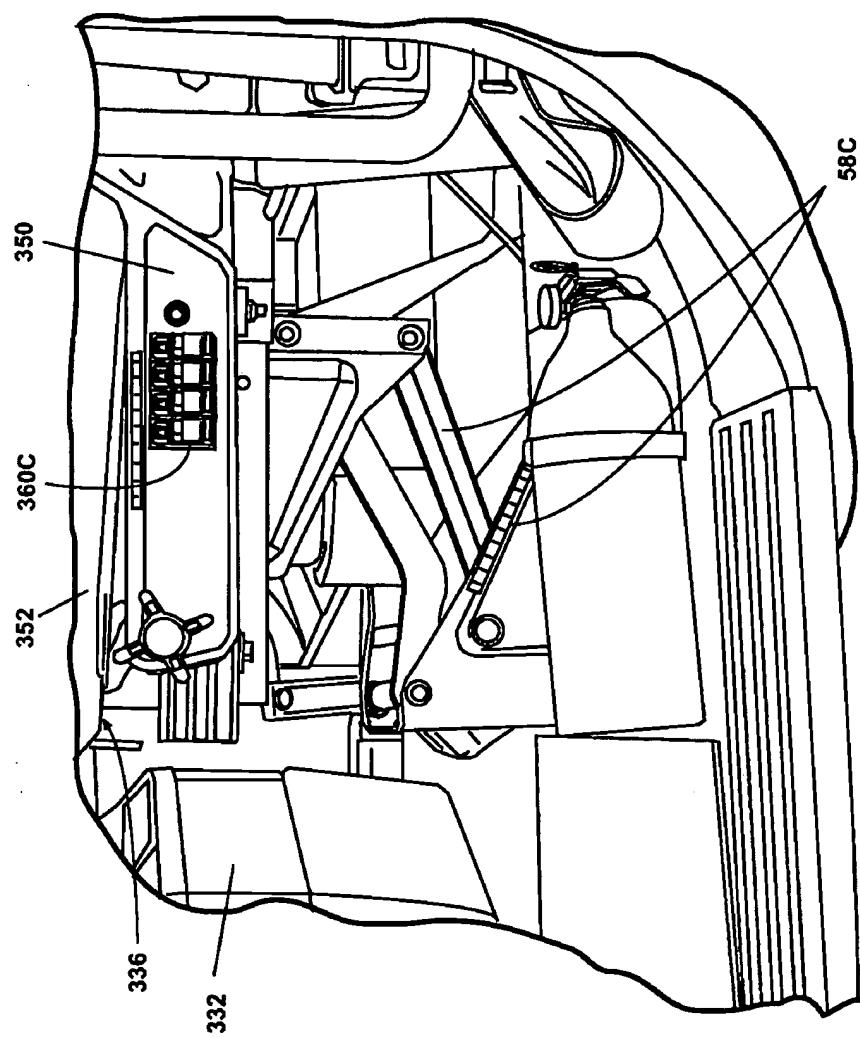


Fig. 73

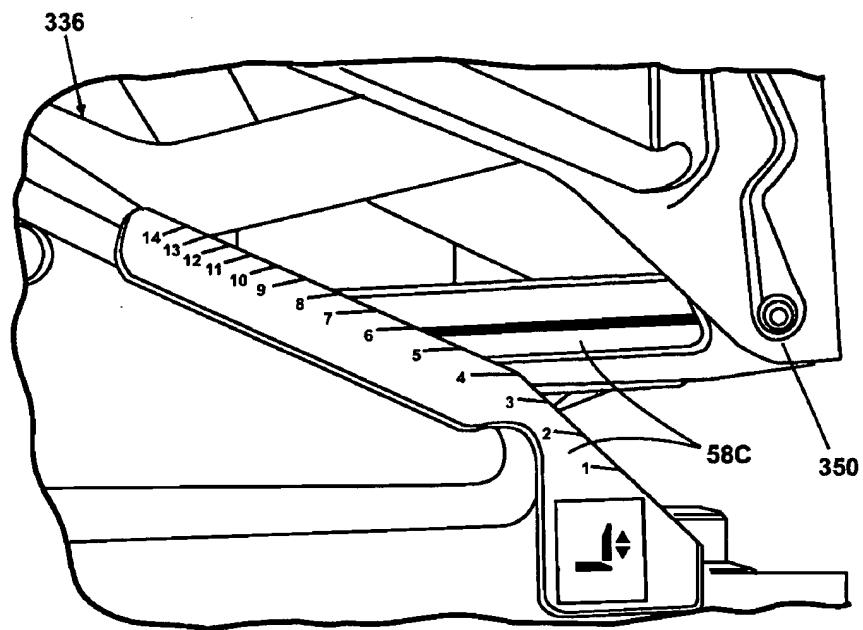


Fig. 74

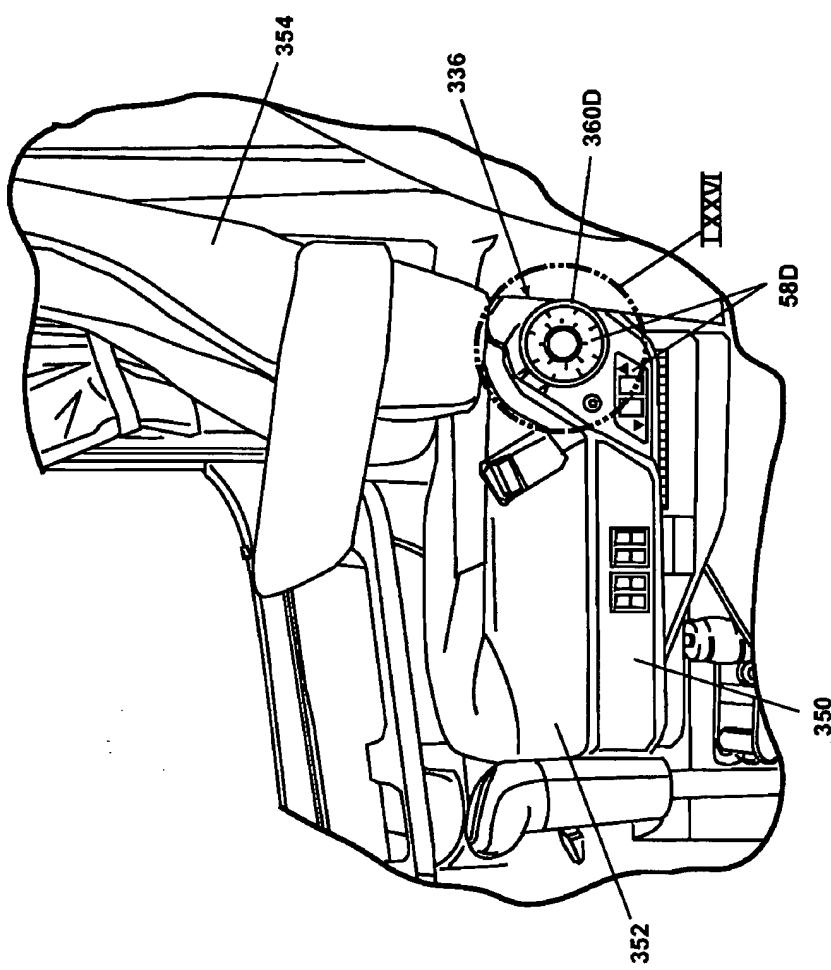


Fig. 75

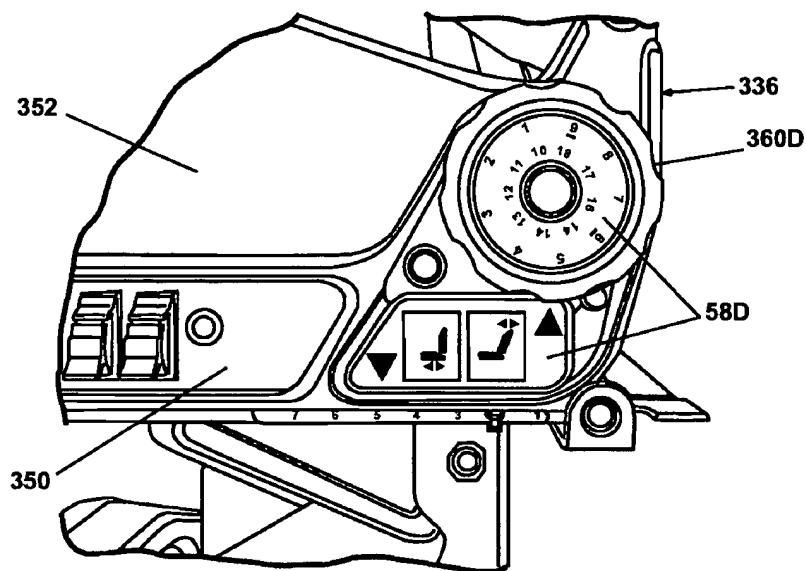


Fig. 76

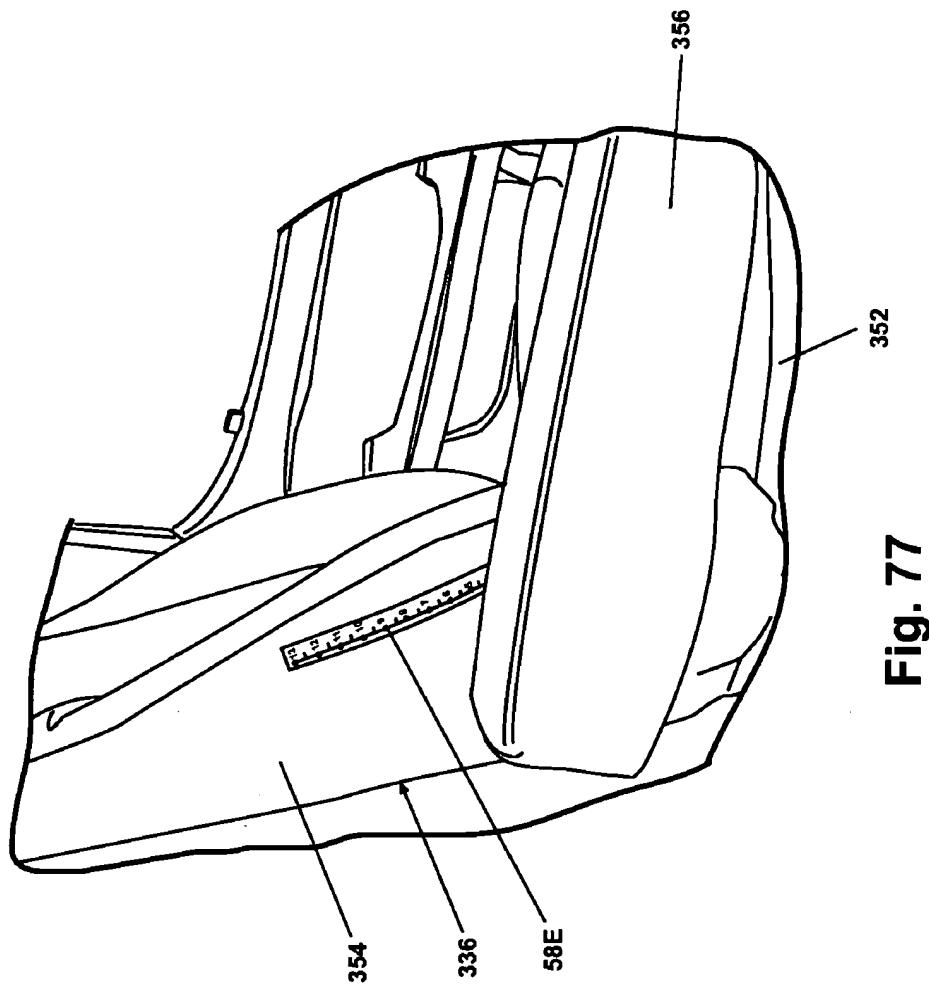


Fig. 77

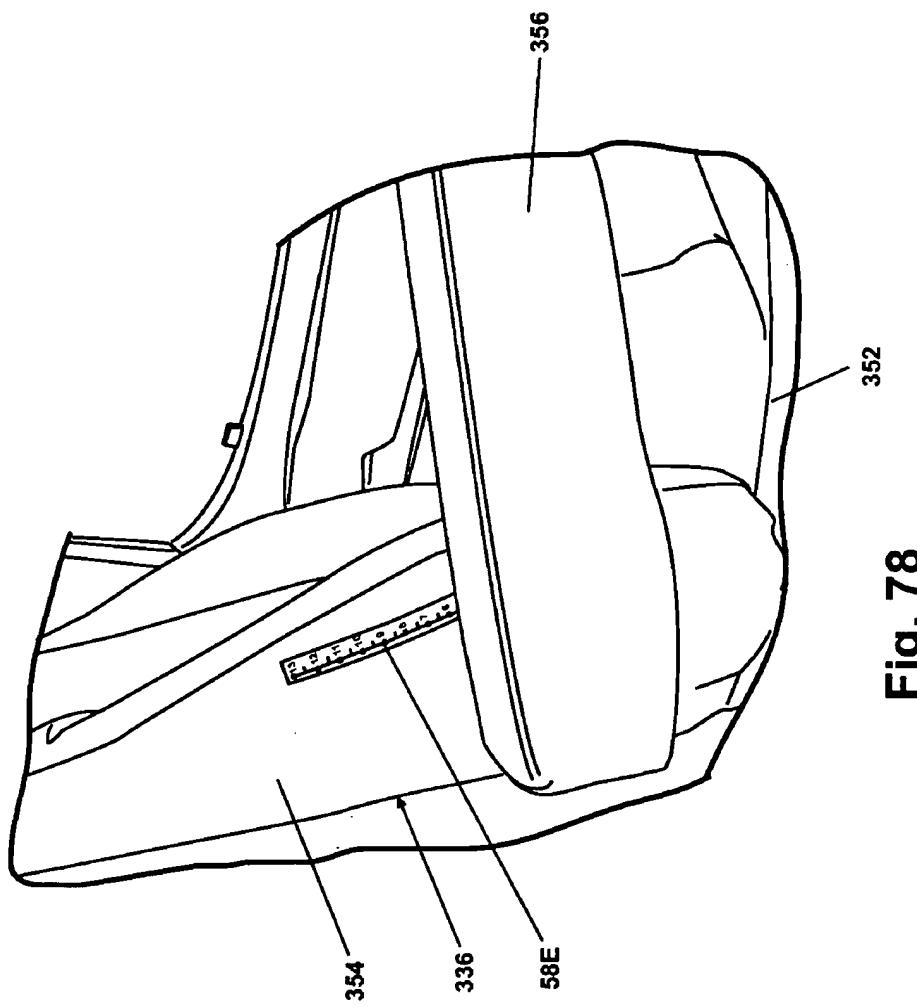


Fig. 78

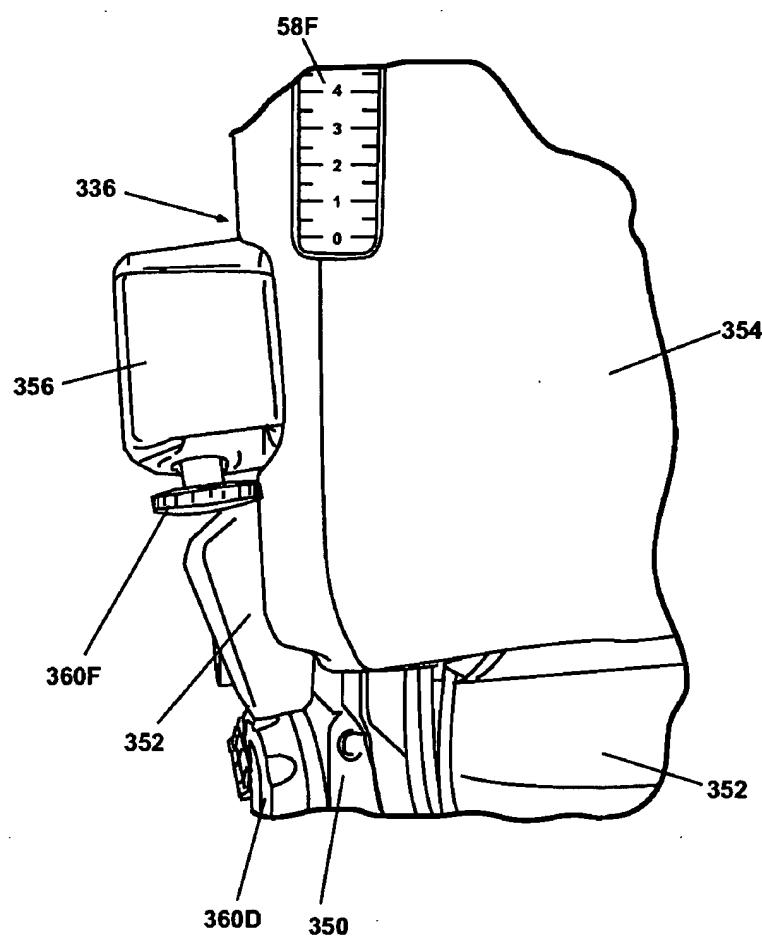


Fig. 79

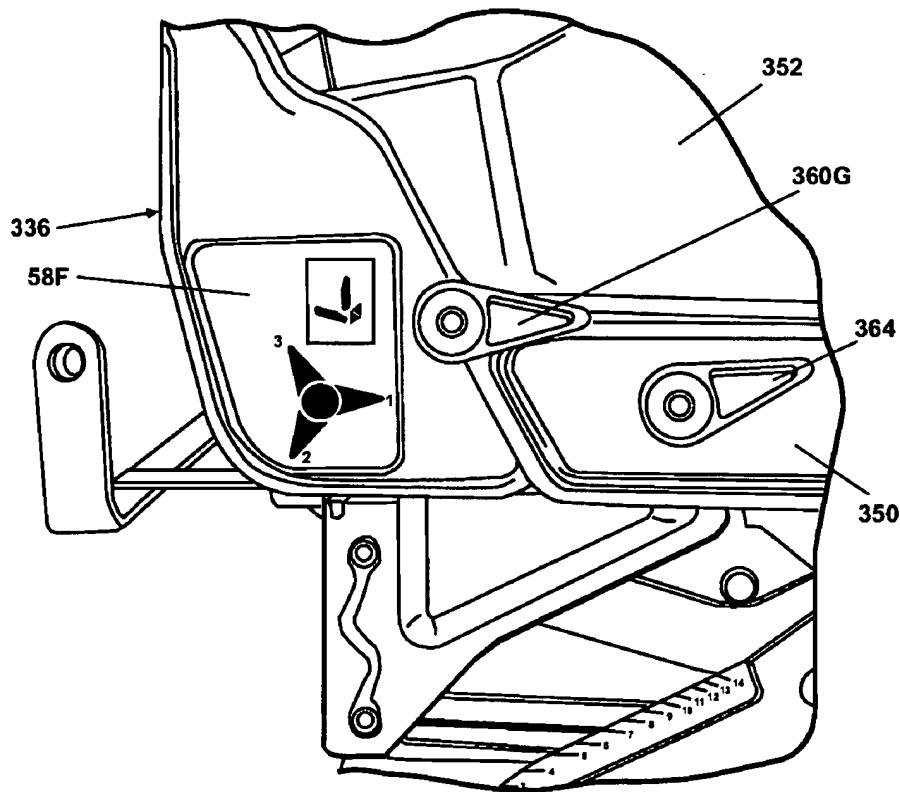


Fig. 80

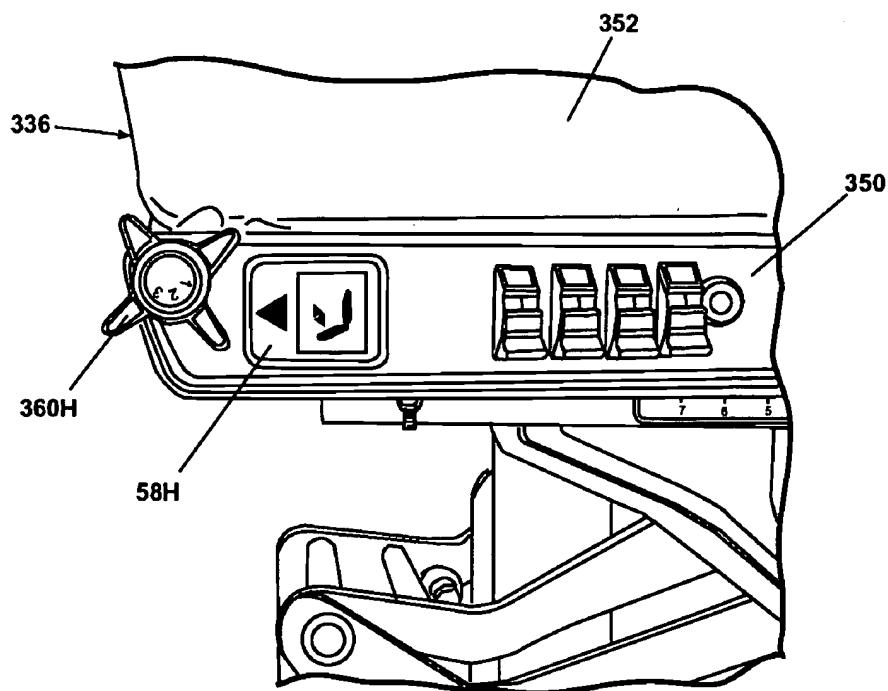


Fig. 81

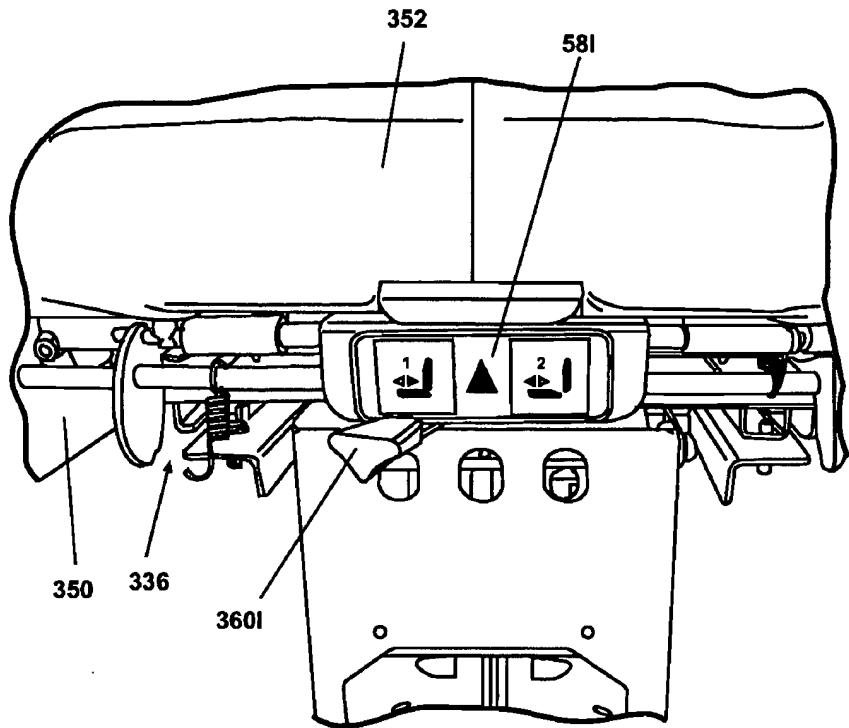


Fig. 82

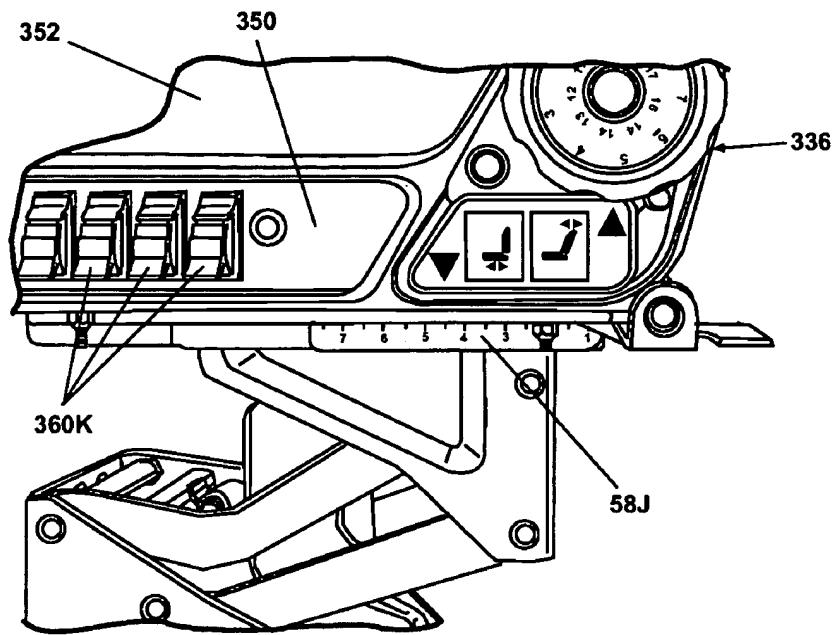


Fig. 83